

Question 1 of 231



A 21-year-old woman with a history of eczema presents with a change in the colour of her skin affecting the hands and feet symmetrically:



What is the most likely diagnosis?

- A. Excessive topical corticosteroid use
- B. Leprosy
- C. Tuberous sclerosis
- ☒ D. Vitiligo
- E. Pityriasis versicolor

Question stats

A	<div style="width: 9.8%;"></div>	9.8%
B	<div style="width: 0.4%;"></div>	0.4%
C	<div style="width: 0.4%;"></div>	0.4%
D	<div style="width: 83.1%;"></div>	83.1%
E	<div style="width: 6.3%;"></div>	6.3%

83.1% of users answered this question correctly

Session score = 100%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Vitiligo

Vitiligo

Vitiligo is an autoimmune condition which results in the loss of melanocytes and consequent depigmentation of the skin. It is thought to affect around 1% of the population and symptoms typically develop by the age of 20-30 years.

Features

- well demarcated patches of depigmented skin
- the peripheries tend to be most affected
- trauma may precipitate new lesions (Koebner phenomenon)

Associated conditions

- type 1 diabetes mellitus
- Addison's disease
- autoimmune thyroid disorders
- pernicious anaemia
- alopecia areata

Management

- sun block for affected areas of skin
- camouflage make-up
- topical corticosteroids may reverse the changes if applied early
- there may also be a role for topical tacrolimus and phototherapy, although caution needs to be exercised with light-skinned patients

Rate question:

Question 10 of 231



A 79-year-old woman presents with an itchy, blistering rash. Examination of her mouth is unremarkable.



Image used on license from [DermNet NZ](#) and with the kind permission of Prof Raimo Suhonen

What is the most likely diagnosis?



A. Dermatitis herpetiformis

B. Drug reaction to lisinopril



C. Bullous pemphigoid

D. Pemphigus vulgaris

E. Epidermolysis bullosa

Blisters/bullae

- no mucosal involvement (in exams at least*): bullous pemphigoid
- mucosal involvement: pemphigus vulgaris

Question stats

A	1.3%
B	0.6%
C	78.5%
D	11.9%
E	7.7%

78.5% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Bullous pemphigoid

[British Association of Dermatologists](#)

Bullous pemphigoid guidelines

Bullous pemphigoid

Bullous pemphigoid is an autoimmune condition causing sub-epidermal blistering

of the skin. This is secondary to the development of antibodies against hemidesmosomal proteins BP180 and BP230

Bullous pemphigoid is more common in elderly patients. Features include

- itchy, tense blisters typically around flexures
- the blisters usually heal without scarring
- mouth is usually spared*

Skin biopsy

- immunofluorescence shows IgG and C3 at the dermoepidermal junction

Management

- referral to dermatologist for biopsy and confirmation of diagnosis
- oral corticosteroids are the mainstay of treatment
- topical corticosteroids, immunosuppressants and antibiotics are also used

*in reality around 10-50% of patients have a degree of mucosal involvement. It would however be unusual for an exam question to mention mucosal involvement as it is seen as a classic differentiating feature between pemphigoid and pemphigus.

Rate question:

Question 3 of 131



A 4-year-old boy develops multiple tear-drop papules on his trunk and limbs. He is otherwise well. A diagnosis of guttate psoriasis is suspected. What is the most appropriate management?



- A. Oral penicillin for 14 days
- B. Reassurance + topical treatment if lesions are symptomatic
- C. Oral penicillin for 14 days + topical treatment if lesions are symptomatic
- D. Referral to secondary care
- E. Oral corticosteroids

The British Association of Dermatologists state in their psoriasis guidelines that 'evidence does not support a therapeutic benefit from antibiotic therapy'.

Psoriasis: guttate

Guttate psoriasis is more common in children and adolescents. It may be precipitated by a streptococcal infection 2-4 weeks prior to the lesions appearing

Features

- tear drop papules on the trunk and limbs

Management

- most cases resolve spontaneously within 2-3 months
- there is no firm evidence to support the use of antibiotics to eradicate streptococcal infection
- topical agents as per psoriasis
- UVB phototherapy
- tonsillectomy may be necessary with recurrent episodes

Rate question:

Question stats

A	<div style="width: 3.1%;"></div>	3.1%
B	<div style="width: 60.5%;"></div>	60.5%
C	<div style="width: 13.5%;"></div>	13.5%
D	<div style="width: 19.4%;"></div>	19.4%
E	<div style="width: 3.5%;"></div>	3.5%

60.5% of users answered this question correctly

Session score = 66.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Dermnet NZ](#)

Guttate psoriasis

Question 4 of 131



Each one of the following is associated with hirsutism, except:

- ✓ A. **Porphyria cutanea tarda**
- ✗ B. **Congenital adrenal hyperplasia**
- C. Polycystic ovarian syndrome
- D. Adrenal tumour
- E. Cushing's syndrome

Porphyria cutanea tarda is a cause of hypertrichosis rather than hirsutism

Hirsutism and hypertrichosis

/hirsutism is often used to describe androgen-dependent hair growth in women, with hypertrichosis being used for androgen-independent hair growth

Polycystic ovarian syndrome is the most common causes of hirsutism. Other causes include:

- Cushing's syndrome
- congenital adrenal hyperplasia
- androgen therapy
- obesity: due to peripheral conversion oestrogens to androgens
- adrenal tumour
- androgen secreting ovarian tumour
- drugs: phenytoin

Assessment of hirsutism

- Ferriman-Gallwey scoring system: 9 body areas are assigned a score of 0 - 4, a score > 15 is considered to indicate moderate or severe hirsutism

Management of hirsutism

- advise weight loss if overweight
- cosmetic techniques such as waxing/bleaching - not available on the NHS
- consider using combined oral contraceptive pills such as co-cyprindiol (Dianette) or ethinylestradiol and drospirenone (Yasmin). Co-cyprindiol should not be used long-term due to the increased risk of venous thromboembolism
- facial hirsutism: topical eflornithine - contraindicated in pregnancy and breast-feeding

Causes of hypertrichosis

- drugs: minoxidil, ciclosporin, diazoxide
- congenital hypertrichosis lanuginosa, congenital hypertrichosis terminalis

Question stats

A	<div style="width: 80.9%;"></div>	80.9%
B	<div style="width: 4.9%;"></div>	4.9%
C	<div style="width: 0.5%;"></div>	0.5%
D	<div style="width: 5.3%;"></div>	5.3%
E	<div style="width: 8.4%;"></div>	8.4%

80.9% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Hirsutism

[DermNet NZ](#)

Hirsutism

- porphyria cutanea tarda
- anorexia nervosa

Rate question:

Question 5 of 131



A 14-year-old male is reviewed by his GP due to a patch of scaling and hair loss on the right side of his head. A skin scraping is sent which confirms a diagnosis of tinea capitis. Which organism is most likely to be responsible?

- ✓ A. *Trichophyton tonsurans*
- B. *Microsporum distortum*
- ✗ C. *Trichophyton verrucosum*
- D. *Microsporum audouinii*
- E. *Candida*

Question stats

A	<div></div>	66.5%
B	<div></div>	5.9%
C	<div></div>	18.8%
D	<div></div>	4.8%
E	<div></div>	4%

66.5% of users answered this question correctly

Session score = 40%

Tinea

Tinea is a term given to dermatophyte fungal infections. Three main types of infection are described depending on what part of the body is infected

- tinea capitis - scalp
- tinea corporis - trunk, legs or arms
- tinea pedis - feet

Tinea capitis (scalp ringworm)

- a cause of scarring alopecia mainly seen in children
- if untreated a raised, pustular, spongy/boggy mass called a kerion may form
- most common cause is *Trichophyton tonsurans* in the UK and the USA
- may also be caused by *Microsporum canis* acquired from cats or dogs
- diagnosis: lesions due to *Microsporum canis* green fluorescence under Wood's lamp*. However the most useful investigation is scalp scrapings
- management (based on CKS guidelines): oral antifungals: terbinafine for *Trichophyton tonsurans* infections and griseofulvin for *Microsporum* infections. Topical ketoconazole shampoo should be given for the first two weeks to reduce transmission

Tinea corporis

- causes include *Trichophyton rubrum* and *Trichophyton verrucosum* (e.g. From contact with cattle)
- well-defined annular, erythematous lesions with pustules and papules
- may be treated with oral fluconazole

Tinea pedis (athlete's foot)

- characterised by itchy, peeling skin between the toes
- common in adolescence

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Fungal skin infection - scalp

*lesions due to Trichophyton species do not readily fluoresce under Wood's lamp

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 6 of 131

A 39-year-old man asks you to look at a skin lesion on the dorsum of his hand. It has been present for the past two years and has not changed recently.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- ✓ A. **Granuloma annulare**
- B. Basal cell carcinoma
- C. Tinea corporis
- D. Xanthoma
- E. Lichen planus

Question stats

A	<div style="width: 70.9%;"></div>	70.9%
B	<div style="width: 19.4%;"></div>	19.4%
C	<div style="width: 3.3%;"></div>	3.3%
D	<div style="width: 3.2%;"></div>	3.2%
E	<div style="width: 3.1%;"></div>	3.1%

70.9% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of granuloma annulare

Granuloma annulare

Basics

- papular lesions that are often slightly hyperpigmented and depressed centrally
- typically occur on the dorsal surfaces of the hands and feet, and on the extensor aspects of the arms and legs

A number of associations have been proposed to conditions such as diabetes mellitus but there is only weak evidence for this

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 7 of 131



A 54-year-old woman is prescribed topical fusidic acid for a small patch of impetigo around her nose. She has recently been discharged from hospital following varicose vein surgery. Seven days after starting treatment there has been no change in her symptoms. Examination reveals a persistent small, crusted area around the right nostril. Whilst awaiting the results of swabs, what is the most appropriate management?

- A. Oral vancomycin
- B. Oral erythromycin
- C. Topical metronidazole
- D. **Topical mupirocin**
- E. Oral flucloxacillin



Question stats

A	2.6%
B	1.9%
C	3.9%
D	51.6%
E	39.9%

51.6% of users answered this question correctly

Session score = 42.9%

MRSA should be considered given the recent hospital stay and lack of response to fusidic acid. Topical mupirocin is therefore the most appropriate treatment.

Impetigo: management

Limited, localised disease

- topical fusidic acid is first-line
- topical retapamulin is used second-line if fusidic acid has been ineffective or is not tolerated
- MRSA is not susceptible to either fusidic acid or retapamulin. Topical mupirocin (Bactroban) should therefore be used in this situation

Extensive disease

- oral flucloxacillin
- oral erythromycin if penicillin allergic

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Impetigo guidelines

Question 8 of 131

Please look at the lesion on the lower lip:



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Squamous cell carcinoma
- ✓ B. Venous lake
- C. Peutz-Jeghers syndrome
- D. Kaposi sarcoma
- E. Malignant melanoma

Venous lake

Angiomas on the lips are called venous lakes. Diagnosis is usually clinical and no treatment is required except for cosmetic reasons.

Rate question:

Question stats

A	5.5%
B	52.9%
C	12.7%
D	13.3%
E	15.6%

52.9% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 9 of 131



A 72-year-old woman is diagnosed with a number of erythematous, rough lesions on the back of her hands. A diagnosis of actinic keratoses is made. What is the most appropriate management?

- A. Reassurance
- B. Urgent referral to a dermatologist
- ✓ C. Topical fluorouracil cream
- D. Review in 3 months
- ✗ E. Topical betnovate

Question stats

A	11.2%
B	14.6%
C	64.8%
D	4.9%
E	4.4%

64.8% of users answered this question correctly

Session score = 44.4%

Actinic keratoses

Actinic, or solar, keratoses (AK) is a common premalignant skin lesion that develops as a consequence of chronic sun exposure

Features

- small, crusty or scaly, lesions
- may be pink, red, brown or the same colour as the skin
- typically on sun-exposed areas e.g. temples of head
- multiple lesions may be present

Management options include

- prevention of further risk: e.g. sun avoidance, sun cream
- fluorouracil cream: typically a 2 to 3 week course. The skin will become red and inflamed - sometimes topical hydrocortisone is given following fluorouracil to help settle the inflammation
- topical diclofenac: may be used for mild AKs. Moderate efficacy but much fewer side-effects
- topical imiquimod: trials have shown good efficacy
- cryotherapy
- curettage and cautery

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

2007 Actinic keratoses guidelines

[DermNet NZ](#)

Actinic keratoses

Question 10 of 131



A 43-year-old presents with itchy lesions on the soles of both feet. These have been present for the past two months. On examination small blisters are seen with surrounding dry and cracked skin. What is the most likely diagnosis?

- A. Porphyria cutanea tarda
- B. Pustular psoriasis
- C. Pompholyx
- D. Bullous pemphigoid
- E. Pemphigus



Question stats

A	8.5%
B	20.8%
C	61.5%
D	5.8%
E	3.4%

61.5% of users answered this question correctly

Session score = 40%

Pompholyx

Pompholyx is a type of eczema which affects both the hands (cheiropompholyx) and the feet (pedopompholyx). It is also known as dyshidrotic eczema

Features

- small blisters on the palms and soles
- pruritic, sometimes burning sensation
- once blisters burst skin may become dry and crack

Management

- cool compresses
- emollients
- topical steroids

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Dermnet NZ](#)

Photos of pompholyx

Question 11 of 131





A 30-year-old woman presents with a painful 'rash' on her shins:



Image used on license from [DermNet NZ](#) and with the kind permission of Prof Raimo Suhonen



These have been present for the past 2 weeks. There is no past medical history of note and she takes no regular medications. What is the most useful next investigation?

- A. Liver function tests
-  B. Anti-nuclear antibody
- C. ECG
- D. HIV test
-  E. Chest x-ray

Question stats

A	8.3%
B	24%
C	0.4%
D	6.9%
E	60.4%

60.4% of users answered this question correctly

Session score = 36.4%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema nodosum

The likely diagnosis here is erythema nodosum (EN). All these tests may have a place but a chest x-ray is important as it helps exclude sarcoidosis and tuberculosis, two important cause of EN

Erythema nodosum

Overview

- inflammation of subcutaneous fat
- typically causes tender, erythematous, nodular lesions
- usually occurs over shins, may also occur elsewhere (e.g. forearms, thighs)
- usually resolves within 6 weeks
- lesions heal without scarring

Causes

- infection: streptococci, TB, brucellosis
- systemic disease: sarcoidosis, inflammatory bowel disease, Behcet's
- malignancy/lymphoma
- drugs: penicillins, sulphonamides, combined oral contraceptive pill
- pregnancy

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 12 of 131



A 19-year-old asks for help with a long-standing problem of spots, particularly around his forehead:



Which one of the following is the best descriptive term for the skin lesions?



A. Moderate acne vulgaris



B. Severe acne vulgaris

C. Acne conglobata

D. Acne fulminans

E. Mild acne vulgaris

Widespread non-inflammatory lesions and numerous papules and pustules point to a diagnosis of moderate acne vulgaris

Acne vulgaris: features

Acne is a disease of the pilosebaceous unit. Several different types of acne lesions are usually seen in each patient

Comedones are due to a dilated sebaceous follicle

- if the top is closed a whitehead is seen
- if the top opens a blackhead forms

Inflammatory lesions form when the follicle bursts releasing irritants

- papules
- pustules

Question stats

A	<div style="width: 80.6%;"></div>	80.6%
B	<div style="width: 7.6%;"></div>	7.6%
C	<div style="width: 1.6%;"></div>	1.6%
D	<div style="width: 0.5%;"></div>	0.5%
E	<div style="width: 9.7%;"></div>	9.7%

80.6% of users answered this question correctly

Session score = 33.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

An excessive inflammatory response may result in:

- nodules
- cysts

This sequence of events can ultimately cause scarring

- ice-pick scars
- hypertrophic scars

In contrast, **drug-induced acne** is often monomorphic (e.g. pustules are characteristically seen in steroid use)

Acne fulminans is very severe acne associated with systemic upset (e.g. fever). Hospital admission is often required and the condition usually responds to oral steroids

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)



Question 11 of 231



A 62-year-old man presents with a lesion on the right side of his nose. He is unsure how long it has been there.



What is the most likely diagnosis?

- A. Desmoplastic trichoepithelioma
-  B. Squamous cell carcinoma
- C. Impetigo
-  D. Basal cell carcinoma
- E. Actinic keratosis

The rolled, pearly edges with telangiectasia surrounding a central crater make basal cell carcinoma the most likely diagnosis.

Basal cell carcinoma

Basal cell carcinoma (BCC) is one of the three main types of skin cancer. Lesions are also known as rodent ulcers and are characterised by slow-growth and local invasion. Metastases are extremely rare. BCC is the most common type of cancer in the Western world.

Features

- many types of BCC are described. The most common type is nodular BCC,

Question stats

A	0.4%
B	12.7%
C	0.3%
D	84.9%
E	1.6%

84.9% of users answered this question correctly

Session score = 45.5%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Basal cell carcinoma

which is described here

- sun-exposed sites, especially the head and neck account for the majority of lesions
- initially a pearly, flesh-coloured papule with telangiectasia
- may later ulcerate leaving a central 'crater'

Management options:

- surgical removal
- curettage
- cryotherapy
- topical cream: imiquimod, fluorouracil
- radiotherapy

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 17 of 131



This 60-year-old woman who is being treated for heartburn comes for review. She has developed some spots on her lips:



Image used on license from [DermNet NZ](#)

Question stats

A	<div style="width: 49%;"></div>	49%
B	<div style="width: 0.9%;"></div>	0.9%
C	<div style="width: 16.6%;"></div>	16.6%
D	<div style="width: 30%;"></div>	30%
E	<div style="width: 3.5%;"></div>	3.5%

49% of users answered this question correctly

Session score = 35.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

What is the most likely diagnosis?



- A. **CREST syndrome**
- B. Oesophageal cancer
- C. Vitamin C deficiency
- D. Peutz-Jeghers syndrome
- E. Iron-deficiency anaemia

The heartburn may be explained by oesophageal dysmotility, a feature of CREST syndrome. The lesions on her lips are telangiectasia. She also has the typical tightening of the facial skin seen in patients with systemic sclerosis.

Systemic sclerosis

Systemic sclerosis is a condition of unknown aetiology characterised by hardened, sclerotic skin and other connective tissues. It is four times more common in females

There are three patterns of disease:

Limited cutaneous systemic sclerosis

- Raynaud's may be first sign

- scleroderma affects face and distal limbs predominately
- associated with anti-centromere antibodies
- a subtype of limited systemic sclerosis is CREST syndrome: Calcinosis, Raynaud's phenomenon, oEsophageal dysmotility, Sclerodactyly, Telangiectasia

Diffuse cutaneous systemic sclerosis

- scleroderma affects trunk and proximal limbs predominately
- associated with scl-70 antibodies
- hypertension, lung fibrosis and renal involvement seen
- poor prognosis

Scleroderma (without internal organ involvement)

- tightening and fibrosis of skin
- may be manifest as plaques (morphoea) or linear

Antibodies

- ANA positive in 90%
- RF positive in 30%
- anti-scl-70 antibodies associated with diffuse cutaneous systemic sclerosis
- anti-centromere antibodies associated with limited cutaneous systemic sclerosis

Rate question:

Question 13 of 131



A 36-year-old woman is reviewed. She presented 4 weeks ago with itchy dry skin on her arms and was diagnosed as having atopic eczema. She was prescribed hydrocortisone 1% cream with an emollient. Unfortunately there has been no improvement in her symptoms. What is the next step in management, alongside continued regular use of an emollient?



- A. ~~Betamethasone valerate 0.1%~~
- B. Clobetasone butyrate 0.05%
- C. Clobetasol propionate 0.05%
- D. Topical tetracycline
- E. Regular wet wraps

Topical steroids

- moderate: Clobetasone butyrate 0.05%
- potent: Betamethasone valerate 0.1%
- very potent: Clobetasol propionate 0.05%

Clobetasone butyrate 0.05% is a moderately potent topical steroid and would be the most suitable next step in management. It is important to note the potency difference between two very similar sounding steroids - Clobetasone butyrate 0.05% (moderate) and Clobetasol propionate 0.05% (very potent)

Eczema: topical steroids

Use weakest steroid cream which controls patients symptoms

The table below shows topical steroids by potency

Mild	Moderate	Potent	Very potent
Hydrocortisone 0.5-2.5%	Betamethasone valerate 0.025% (Betnovate RD)	Fluticasone propionate 0.05% (Cutivate)	Clobetasol propionate 0.05% (Dermovate)
	Clobetasone butyrate 0.05% (Eumovate)	Betamethasone valerate 0.1% (Betnovate)	

Finger tip rule

- 1 finger tip unit (FTU) = 0.5 g, sufficient to treat a skin area about twice that of the flat of an adult hand

Question stats

A		31.8%
B		53.5%
C		12.2%
D		0.5%
E		2.1%

53.5% of users answered this question correctly

Session score = 30.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

Atopic eczema guidelines

Topical steroid doses for eczema in adults

Area of skin	Fingertip units per dose
Hand and fingers (front and back)	1.0
A foot (all over)	2.0
Front of chest and abdomen	7.0
Back and buttocks	7.0
Face and neck	2.5
An entire arm and hand	4.0
An entire leg and foot	8.0

Rate question:

Question 14 of 131


A 7-year-old girl is brought to surgery due to the development of several small, umbilicated lesions on the thigh of her left leg. There has been no similar lesions in the past, and she is otherwise well apart from a history of asthma. What is the most appropriate management?



- A. **Reassure**
- B. Trial of hydrocortisone
- C. Make discreet enquiries about possible sexual abuse
- D. Refer to secondary care
- E. Topical salicylic acid

Question stats

A	<div style="width: 77.1%;"></div>	77.1%
B	<div style="width: 4.5%;"></div>	4.5%
C	<div style="width: 5.5%;"></div>	5.5%
D	<div style="width: 5.5%;"></div>	5.5%
E	<div style="width: 7.4%;"></div>	7.4%

77.1% of users answered this question correctly

Session score = 35.7%

Molluscum contagiosum

Molluscum contagiosum is caused by a pox DNA virus infection. It is typically seen in younger children and results in characteristic small, pearly, umbilicated lesions

Molluscum contagiosum is highly infectious.

Lesions may be present for up to 12 months and usually resolve spontaneously. Whilst various treatments may be effective in removing the lesions (e.g. surgery, cryotherapy, topical agents) no treatment is recommend in the initial phase due to the benign nature of the condition

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 15 of 131



A 68-year-old man asks you to 'check his moles'. You look at the following area of skin on his back:

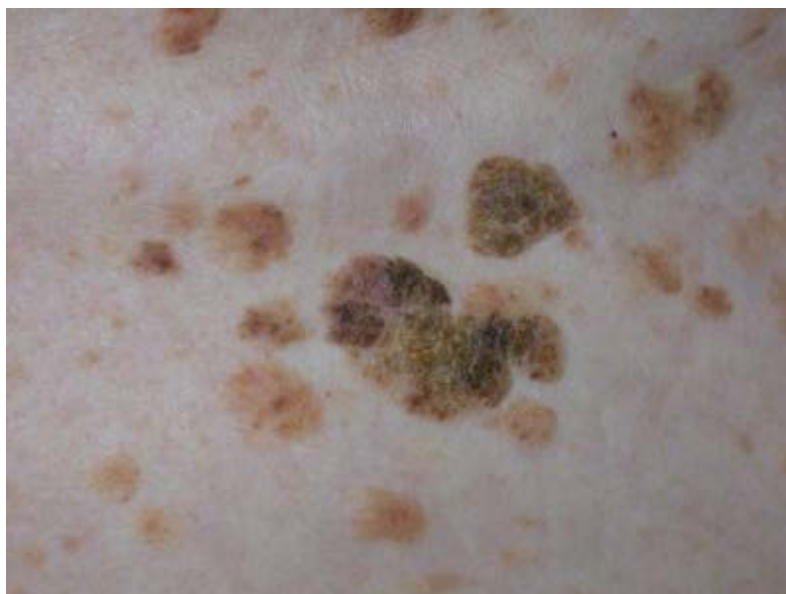




Image used on license from [DermNet NZ](#)



What is the most likely diagnosis?

- A. Actinic keratosis
- B. Benign mole
- C. Bowen's disease
-  D. Malignant melanoma
-  E. Seborrhoeic keratosis

Question stats

A	10.1%
B	1.2%
C	2.6%
D	18.9%
E	67.2%

67.2% of users answered this question correctly

Session score = 33.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Seborrhoeic keratoses

This lesion has the typical warty, 'stuck-on' appearance of a seborrhoeic keratosis.

Seborrhoeic keratoses

Seborrhoeic keratoses are benign epidermal skin lesions seen in older people.

Features

- large variation in colour from flesh to light-brown to black
- have a 'stuck-on' appearance
- keratotic plugs may be seen on the surface

Management

- reassurance about the benign nature of the lesion is an option
- options for removal include curettage, cryosurgery and shave biopsy

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 16 of 131



A 62-year-old woman presents with a 'volcano' like spot on her left arm, which has appeared over the past 3 months. She initially thought it may be a simple spot but it has not gone away. On examination she has a 5 mm red, raised lesion with a central keratin filled crater. A clinical diagnosis of probable keratoacanthoma is made. What is the most suitable management?



- A. Reassure will spontaneously involute within 3 months
- B. Urgent referral to dermatology
- C. Topical 5-FU
- D. Non-urgent to dermatology
- E. Topical hydrocortisone

Whilst keratoacanthoma is a benign lesion it is difficult clinically to exclude squamous cell carcinoma so urgent excision is advised

Keratoacanthoma

Keratoacanthoma is a benign epithelial tumour. They are more frequent in middle age and do not become more common in old age (unlike basal cell and squamous cell carcinoma)

Features - said to look like a volcano or crater

- initially a smooth dome-shaped papule
- rapidly grows to become a crater centrally-filled with keratin

Spontaneous regression of keratoacanthoma within 3 months is common, often resulting in a scar. Such lesions should however be urgently excised as it is difficult clinically to exclude squamous cell carcinoma. Removal also may prevent scarring

Rate question:

Question stats

A	<div></div>	13.7%
B	<div></div>	52.3%
C	<div></div>	10%
D	<div></div>	22.9%
E	<div></div>	1.1%

52.3% of users answered this question correctly

Session score = 31.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Keratoacanthoma pictures

Question 18 of 131



A 54-year-old man presents with a brown velvety rash on the back of his neck around his axilla. A clinical diagnosis of acanthosis nigricans is made. Which one of the following conditions is most associated with this kind of rash?



- A. Hypothyroidism
- B. Psoriasis
- C. Non-alcoholic steatohepatitis
- D. Ulcerative colitis
- E. Chronic pancreatitis

Question stats

A		49.9%
B		2.6%
C		11.8%
D		24.2%
E		11.5%

49.9% of users answered this question correctly

Session score = 38.9%

Acanthosis nigricans

Describes symmetrical, brown, velvety plaques that are often found on the neck, axilla and groin

Causes

- gastrointestinal cancer
- insulin-resistant diabetes mellitus
- obesity
- polycystic ovarian syndrome
- acromegaly
- Cushing's disease
- hypothyroidism
- familial
- Prader-Willi syndrome
- drugs: oral contraceptive pill, nicotinic acid

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Acanthosis nigricans

Rate question:

Question 19 of 131



A 48-year-old man with a history of psoriasis develops plaques on his face. Of the following options, which one is the most appropriate treatment?



A. Hydrocortisone 1%



B. Calcipotriol

C. Coal tar

D. Dithranol

E. Tacrolimus

Difficult question, particularly as there is an emphasis on patient-doctor choice when deciding upon treatment in psoriasis. Vitamin D analogues can be used in this situation but calcipotriol is not recommended as it may cause irritation - calcitriol and tacalcitol are alternatives. Mild potency topical steroids are useful for the management of facial psoriasis. Coal tar is smelly and messy - most patients would not tolerate facial application

Psoriasis: management

SIGN released guidelines in 2010 on the management of psoriasis and psoriatic arthropathy. Please see the link for more details.

Chronic plaque psoriasis

- regular emollients may help to reduce scale loss and reduce pruritus
- for acute control SIGN recommend: 'Short term intermittent use of a potent topical corticosteroid or a combined potent corticosteroid plus calcipotriol

ointment is recommended to gain rapid improvement in plaque psoriasis.'

- 'For long term topical treatment of plaque psoriasis a vitamin D analogue (e.g. Calcipotriol) is recommended.'
- 'If a vitamin D analogue is ineffective or not tolerated then consider coal tar (solution, cream or lotion), tazarotene gel, or short contact dithranol (30 minute exposure in patients with a small number of relatively large plaques of psoriasis).

Steroids in psoriasis

- topical steroids are commonly used in flexural psoriasis and there is also a role for mild steroids in facial psoriasis. If steroids are ineffective for these conditions vitamin D analogues or tacrolimus ointment should be used second line
- SIGN caution against the long term use of potent or very potent topical steroids due to the risk of side-effects

Scalp psoriasis

Question stats

A		54.3%
B		31.5%
C		4.2%
D		4.8%
E		5.2%

54.3% of users answered this question correctly

Session score = 36.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[SIGN](#)

2010 Psoriasis guidelines

- for short term control SIGN recommend either the use of potent topical corticosteroids or a combination of a potent corticosteroid and a vitamin D

analogue

- 'For patients with thick scaling of the scalp, initial treatment with overnight application of salicylic acid, tar preparations, or oil preparations (eg olive oil, coconut oil) to remove thick scale is recommended.

Secondary care management

Phototherapy

- narrow band ultraviolet B light (311-313nm) is now the treatment of choice
- photochemotherapy is also used - psoralen + ultraviolet A light (PUVA)
- adverse effects: skin ageing, squamous cell cancer (not melanoma)

Systemic therapy

- methotrexate: useful if associated joint disease
- ciclosporin
- systemic retinoids
- biological agents: infliximab, etanercept and adalimumab
- ustekinumab (IL-12 and IL-23 blocker) is showing promise in early trials

Mechanism of action of commonly used drugs:

- coal tar: probably inhibit DNA synthesis
- calcipotriol: vitamin D analogue which reduces epidermal proliferation and restores a normal horny layer
- dithranol: inhibits DNA synthesis, wash off after 30 mins, SE: burning, staining

Rate question:

Question 20 of 131



A 62-year-old male is referred to dermatology by his GP due to a lesion over his shin. On examination shiny, painless areas of yellow skin over the shin are found with abundant telangiectasia. What is the most likely diagnosis?



- A. Pretibial myxoedema
- B. Necrobiosis lipoidica diabetorum
- C. Erythema nodosum
- D. Pyoderma gangrenosum
- E. Syphilis

Question stats

A	<div></div>	12%
B	<div></div>	81.7%
C	<div></div>	2.1%
D	<div></div>	3.8%
E	<div></div>	0.4%

81.7% of users answered this question correctly

Session score = 40%

Shin lesions

The differential diagnosis of shin lesions includes the following conditions:

- erythema nodosum
- pretibial myxoedema
- pyoderma gangrenosum
- necrobiosis lipoidica diabetorum

Below are the characteristic features:

Erythema nodosum

- symmetrical, erythematous, tender, nodules which heal without scarring
- most common causes are streptococcal infections, sarcoidosis, inflammatory bowel disease and drugs (penicillins, sulphonamides, oral contraceptive pill)

Pretibial myxoedema

- symmetrical, erythematous lesions seen in Graves' disease
- shiny, orange peel skin

Pyoderma gangrenosum

- initially small red papule
- later deep, red, necrotic ulcers with a violaceous border
- idiopathic in 50%, may also be seen in inflammatory bowel disease, connective tissue disorders and myeloproliferative disorders

Necrobiosis lipoidica diabetorum

- shiny, painless areas of yellow/red skin typically on the shin of diabetics

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of erythema nodosum

[DermIS.net](#)

Picture of pretibial myxoedema

[DermNet NZ](#)

Picture of pyoderma gangrenosum

[DermNet NZ](#)

Picture of necrobiosis lipoidica

often associated with telangiectasia

Rate question:

Question 21 of 131



A woman who is 30 weeks pregnant asks you about an itchy rash on her abdomen:



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?



- A. Pre-eclampsia
- B. Polymorphic eruption of pregnancy
- C. Primary herpes simplex infection
- D. Pemphigoid gestationis
- E. Pompholyx

Question stats

A	0.4%
B	79.4%
C	0.4%
D	19.1%
E	0.6%

79.4% of users answered this question correctly

Session score = 42.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Polymorphic eruption of pregnancy

[DermNet NZ](#)

Pemphigoid gestationis

Skin disorders associated with pregnancy

Polymorphic eruption of pregnancy

- pruritic condition associated with last trimester
- lesions often first appear in abdominal striae
- management depends on severity: emollients, mild potency topical steroids and oral steroids may be used

Pemphigoid gestationis

- pruritic blistering lesions

- often develop in peri-umbilical region, later spreading to the trunk, back, buttocks and arms
- usually presents 2nd or 3rd trimester and is rarely seen in the first pregnancy
- oral corticosteroids are usually required

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 22 of 131



A 29-year-old man presents due to the development of 'hard skin' on his scalp. On examination he has a 4cm circular, white, hyperkeratotic lesion on the crown of his head. He has no past history of any skin or scalp disorder. Skin scrapings are reported as follows:

No fungal elements seen

What is the most likely diagnosis?



A. Psoriasis

B. Dissecting cellulitis



C. Kerion

D. Systemic lupus erythematosus

E. Seborrhoeic dermatitis

As the skin scraping is negative for fungi the most likely diagnosis is psoriasis. Scalp psoriasis may occur in isolation in patients with no history of psoriasis elsewhere. Please see the link for more information.

The white appearance of the lesion is secondary to the 'silver scale' covering the psoriatic plaque.

Psoriasis

Psoriasis is a common and chronic skin disorder. It generally presents with red, scaly patches on the skin although it is now recognised that patients with psoriasis are at increased risk of arthritis and cardiovascular disease.

Pathophysiology

- multifactorial and not yet fully understood
- genetic: associated HLA-B13, -B17, and -Cw6. Strong concordance (70%) in identical twins
- immunological: abnormal T cell activity stimulates keratinocyte proliferation. There is increasing evidence this may be mediated by a novel group of T helper cells producing IL-17, designated Th17. These cells seem to be a third T-effector cell subset in addition to Th1 and Th2
- environmental: it is recognised that psoriasis may be worsened (e.g. Skin trauma, stress), triggered (e.g. Streptococcal infection) or improved (e.g. Sunlight) by environmental factors

Recognised subtypes of psoriasis

- plaque psoriasis: the most common sub-type resulting in the typical well demarcated red, scaly patches affecting the extensor surfaces, sacrum and

Question stats

A		43.3%
B		0.5%
C		35.7%
D		1.4%
E		19.1%

43.3% of users answered this question correctly

Session score = 40.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[SIGN](#)

2010 Psoriasis guidelines

[DermNet NZ](#)

Scalp psoriasis

scalp

- flexural psoriasis: in contrast to plaque psoriasis the skin is smooth
- guttate psoriasis: transient psoriatic rash frequently triggered by a streptococcal infection. Multiple red, teardrop lesions appear on the body
- pustular psoriasis: commonly occurs on the palms and soles

Other features

- nail signs: pitting, onycholysis
- arthritis

Complications

- psoriatic arthropathy (around 10%)
- increased incidence of metabolic syndrome
- increased incidence of cardiovascular disease
- psychological distress

Rate question:

Question 12 of 231



Which one of the following steroid creams is the most potent?

- A. Cutivate (Fluticasone propionate 0.05%)
- B. Eumovate (Clobetasone butyrate 0.05%)
- C. Betnovate RD (Betamethasone valerate 0.025%)
- D. Betnovate (Betamethasone valerate 0.1%)
- E. Dermovate (Clobetasol propionate 0.05%)



Question stats

A	3.8%
B	10.7%
C	4.3%
D	10%
E	71.3%

71.3% of users answered this question correctly

Session score = 50%

Eczema: topical steroids

Use weakest steroid cream which controls patients symptoms

The table below shows topical steroids by potency

Mild	Moderate	Potent	Very potent
Hydrocortisone 0.5-2.5%	Betamethasone valerate 0.025% (Betnovate RD)	Fluticasone propionate 0.05% (Cutivate)	Clobetasol propionate 0.05% (Dermovate)
	Clobetasone butyrate 0.05% (Eumovate)	Betamethasone valerate 0.1% (Betnovate)	

Finger tip rule

- 1 finger tip unit (FTU) = 0.5 g, sufficient to treat a skin area about twice that of the flat of an adult hand

Topical steroid doses for eczema in adults

Area of skin	Fingertip units per dose
Hand and fingers (front and back)	1.0
A foot (all over)	2.0
Front of chest and abdomen	7.0
Back and buttocks	7.0
Face and neck	2.5
An entire arm and hand	4.0
An entire leg and foot	8.0

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

Atopic eczema guidelines

Rate question:

Question 23 of 131



A 45-year-old woman is presents with itchy, violaceous papules on the flexor aspects of her wrists. She is normally fit and well and has not had a similar rash previously. Given the likely diagnosis, what other feature is she most likely to have?

- A. Onycholysis
- B. Raised ESR
- ✓ C. Mucous membrane involvement
- D. Pain in small joints
- E. Microscopic haematuria

Question stats

A	8.9%
B	17.7%
C	53.5%
D	13.8%
E	6.1%

53.5% of users answered this question correctly

Session score = 43.5%

Lichen

- planus: purple, pruritic, papular, polygonal rash on flexor surfaces. Wickham's striae over surface. Oral involvement common
- sclerosus: itchy white spots typically seen on the vulva of elderly women

Mucous membrane involvement is common in lichen planus

Lichen planus

Lichen planus is a skin disorder of unknown aetiology, most probably being immune mediated

Features

- itchy, papular rash most common on the palms, soles, genitalia and flexor surfaces of arms
- rash often polygonal in shape, 'white-lace' pattern on the surface (Wickham's striae)
- Koebner phenomenon may be seen (new skin lesions appearing at the site of trauma)
- oral involvement in around 50% of patients
- nails: thinning of nail plate, longitudinal ridging

Lichenoid drug eruptions - causes:

- gold
- quinine
- thiazides

Management

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of lichen planus

[DermNet NZ](#)

Picture of Wickham's striae

- topical steroids are the mainstay of treatment
- extensive lichen planus may require oral steroids or immunosuppression

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 24 of 131



A 78-year-old nursing home resident is reviewed due to the development of an intensely itchy rash. On examination white linear lesions are seen on the wrists and elbows, and red papules are present on the penis. What is the most appropriate management?



A. Topical permethrin



B. Referral to GUM clinic

C. Topical betnovate

D. Topical ketoconazole

E. Topical selenium sulphide

Lichen planus may give a similar picture but the intense itching is more characteristic of scabies. It is also less common for lichen planus to present in the elderly - it typically affects patients aged 30-60 years.

Scabies

Scabies is caused by the mite *Sarcoptes scabiei* and is spread by prolonged skin contact. It typically affects children and young adults.

The scabies mite burrows into the skin, laying its eggs in the stratum corneum. The intense pruritus associated with scabies is due to a delayed type IV hypersensitivity reaction to mites/eggs which occurs about 30 days after the initial infection.

Features

- widespread pruritus
- linear burrows on the side of fingers, interdigital webs and flexor aspects of the wrist
- in infants the face and scalp may also be affected
- secondary features are seen due to scratching: excoriation, infection

Management

- permethrin 5% is first-line
- malathion 0.5% is second-line
- give appropriate guidance on use (see below)
- pruritus persists for up to 4-6 weeks post eradication

Patient guidance on treatment (from Clinical Knowledge Summaries)

- avoid close physical contact with others until treatment is complete
- all household and close physical contacts should be treated at the same time, even if asymptomatic
- launder, iron or tumble dry clothing, bedding, towels, etc., on the first day

Question stats

A		56.4%
B		6.3%
C		24.3%
D		6.3%
E		6.7%

56.4% of users answered this question correctly

Session score = 41.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[National Prescribing Centre](#)
2008 Scabies guidelines

[Postgraduate Medical Journal](#)
Review of scabies

[Postgraduate Medical Journal](#)
Scabies management

of treatment to kill off mites.

The BNF advises to apply the insecticide to all areas, including the face and scalp, contrary to the manufacturer's recommendation. Patients should be given the following instructions:

- apply the insecticide cream or liquid to cool, dry skin
- pay close attention to areas between fingers and toes, under nails, armpit area, creases of the skin such as at the wrist and elbow
- allow to dry and leave on the skin for 8–12 hours for permethrin, or for 24 hours for malathion, before washing off
- reapply if insecticide is removed during the treatment period, e.g. If wash hands, change nappy, etc
- repeat treatment 7 days later

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 25 of 131


A 47-year-old lorry driver presents following the development of a widespread urticarial rash. This is associated with pruritus. What is the most appropriate medication to help relieve the itch?



- A. Cetirizine
- B. Loratadine
- C. Chlorphenamine
- D. Ranitidine
- E. Alimemazine

The obvious concern in a lorry driver is drowsiness. Of the non-sedating antihistamines there is some evidence that cetirizine causes more drowsiness than loratadine. Please see BMJ. 2000 April 29; 320(7243): 1184–1187

Antihistamines

Antihistamines are of value in the treatment of allergic rhinitis and urticaria. Of the non-sedating antihistamines there is some evidence that cetirizine may cause more drowsiness than other drugs in the class

Rate question:

Question stats

A	<div style="width: 33.4%;"></div>	33.4%
B	<div style="width: 51.5%;"></div>	51.5%
C	<div style="width: 13.4%;"></div>	13.4%
D	<div style="width: 1%;"></div>	1%
E	<div style="width: 0.7%;"></div>	0.7%

51.5% of users answered this question correctly

Session score = 40%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 26 of 131



Which one of the following conditions causes non-scarring alopecia?

- A. Discoid lupus
- B. Radiotherapy
- C. Lichen planus
- D. Tinea capitis
- E. Alopecia areata



Question stats

A	2.9%
B	4.3%
C	2.7%
D	14.6%
E	75.5%

75.5% of users answered this question correctly

Session score = 42.3%

Alopecia

Alopecia may be divided into scarring (destruction of hair follicle) and non-scarring (preservation of hair follicle)

Scarring alopecia

- trauma, burns
- radiotherapy
- lichen planus
- discoid lupus
- tinea capitis*

Non-scarring alopecia

- male-pattern baldness
- drugs: cytotoxic drugs, carbimazole, heparin, oral contraceptive pill, colchicine
- nutritional: iron and zinc deficiency
- autoimmune: alopecia areata
- telogen effluvium (hair loss following stressful period e.g. surgery)
- trichotillomania

*scarring would develop in untreated tinea capitis if a kerion develops

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 27 of 131



A 21-year-old woman who is 16 weeks pregnant present with worsening acne which she is finding distressing. She is currently using topical benzyl peroxide with limited effect. On examination there is widespread non-inflammatory lesions and pustules on her face. What is the most appropriate next management step?

- A. Oral trimethoprim
- B. Oral lymecycline
- C. Oral erythromycin
- D. Topical retinoid
- E. Oral doxycycline



Question stats

A	4.4%
B	7.3%
C	66.8%
D	16.3%
E	5.3%

66.8% of users answered this question correctly

Session score = 44.4%

Oral erythromycin may be used for acne in pregnancy. The other drugs are contraindicated

Acne vulgaris: management

Acne vulgaris is a common skin disorder which usually occurs in adolescence. It typically affects the face, neck and upper trunk and is characterised by the obstruction of the pilosebaceous follicles with keratin plugs which results in comedones, inflammation and pustules.

Acne may be classified into mild, moderate or severe:

- mild: open and closed comedones with or without sparse inflammatory lesions
- moderate acne: widespread non-inflammatory lesions and numerous papules and pustules
- severe acne: extensive inflammatory lesions, which may include nodules, pitting, and scarring

A simple step-up management scheme often used in the treatment of acne is as follows:

- single topical therapy (topical retinoids, benzyl peroxide)
- topical combination therapy (topical antibiotic, benzoyl peroxide, topical retinoid)
- oral antibiotics: e.g. Oxytetracycline, doxycycline. Improvement may not be seen for 3-4 months. Minocycline is now considered less appropriate due to the possibility of irreversible pigmentation. Gram negative folliculitis may occur as a complication of long-term antibiotic use - high-dose oral trimethoprim is effective if this occurs
- oral isotretinoin: only under specialist supervision

There is no role for dietary modification in patients with acne

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

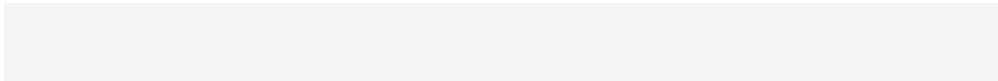
[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Acne vulgaris guidelines

Rate question:



Question 28 of 131


Which one of the following statements regarding strawberry naevi is incorrect?



- A. Cavernous haemangioma is a deep capillary haemangioma
- B. Chorionic villous sampling is a risk factor
- C. Around 65% resolve before 10 years of age
- D. Typically they increase in size for around 6-9 months before slowly regressing
- E. Are usually not present at birth

Around 95% resolve before 10 years of age

Strawberry naevus

Strawberry naevi (capillary haemangioma) are usually not present at birth but may develop rapidly in the first month of life. They appear as erythematous, raised and multilobed tumours.

Typically they increase in size until around 6-9 months before regressing over the next few years (around 95% resolve before 10 years of age).

Common sites include the face, scalp and back. Rarely they may be present in the upper respiratory tract leading to potential airway obstruction

Capillary haemangiomas are present in around 10% of white infants. Female infants, premature infants and those of mothers who have undergone chorionic villous sampling are more likely to be affected

Potential complications

- mechanical e.g. Obstructing visual fields or airway
- bleeding
- ulceration
- thrombocytopaenia

If treatment is required (e.g. Visual field obstruction) then systemic steroids are used

Cavernous haemangioma is a deep capillary haemangioma

Rate question:

Question stats

A		7.5%
B		22.1%
C		44.8%
D		8.1%
E		17.5%

44.8% of users answered this question correctly

Session score = 42.9%

RCGP curriculum



15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)






Question 29 of 131


A 19-year-old man is started on isotretinoin for severe nodulo-cystic acne. Which one of the following side-effects is most likely to occur?

- A. Low mood
- B. Thrombocytopaenia
-  C. **Raised plasma triglycerides**
- D. Reversible alopecia
-  E. **Dry skin**

Dry skin is the most common side-effect of isotretinoin

Question stats

A		14.5%
B		10.8%
C		7.9%
D		3.9%
E		63%

63% of users answered this question correctly

Session score = 41.4%

Isotretinoin

Isotretinoin is an oral retinoid used in the treatment of severe acne. Two-thirds of patients have a long term remission or cure following a course of oral isotretinoin

Adverse effects

- teratogenicity: females should ideally be using two forms of contraception (e.g. Combined oral contraceptive pill and condoms)
- dry skin, eyes and lips: the most common side-effect of isotretinoin
- low mood
- raised triglycerides
- hair thinning
- nose bleeds (caused by dryness of the nasal mucosa)
- benign intracranial hypertension: isotretinoin treatment should not be combined with tetracyclines for this reason

Rate question:
RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 30 of 131



A 58-year-old woman presents with a persistent erythematous rash on her cheeks and a 'red nose'. She describes occasional episodes of facial flushing. On examination erythematous skin is noted on the nose and cheeks associated with occasional papules. What is the most appropriate management?



- A. Topical metronidazole
- B. Oral oxytetracycline
- C. Benzyl peroxide
- D. Dakta cort
- E. Topical hydrocortisone

Given that this woman has mild symptoms, topical metronidazole should be used first line

Acne rosacea

Acne rosacea is a chronic skin disease of unknown aetiology

Features

- typically affects nose, cheeks and forehead
- flushing is often first symptom
- telangiectasia are common
- later develops into persistent erythema with papules and pustules
- rhinophyma
- ocular involvement: blepharitis

Management

- topical metronidazole may be used for mild symptoms (i.e. Limited number of papules and pustules, no plaques)
- more severe disease is treated with systemic antibiotics e.g. Oxytetracycline
- recommend daily application of a high-factor sunscreen
- camouflage creams may help conceal redness
- laser therapy may be appropriate for patients with prominent telangiectasia

Rate question:

Question stats

A	<div style="width: 74.2%;"></div>	74.2%
B	<div style="width: 17.2%;"></div>	17.2%
C	<div style="width: 3.5%;"></div>	3.5%
D	<div style="width: 0.8%;"></div>	0.8%
E	<div style="width: 4.4%;"></div>	4.4%

74.2% of users answered this question correctly

Session score = 43.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links



[Clinical Knowledge Summaries](#)

Rosacea guidelines

Question 31 of 131



A 22-year-old male presents to surgery due to a longstanding problem of bilateral excessive axillary sweating. He is otherwise well but the condition is affecting his confidence and limiting his social life. What is the most appropriate management?

- A. Non-sedating antihistamine
- B. Topical hydrocortisone 1%
-  C. Perform thyroid function tests
-  D. Topical aluminium chloride
- E. Refer to dermatology

Question stats

A	1.2%
B	0.4%
C	6.9%
D	80.5%
E	11.1%

80.5% of users answered this question correctly

Session score = 41.9%

Hyperhidrosis

Hyperhidrosis describes the excessive production of sweat

Management options include

- topical aluminium chloride preparations are first-line. Main side effect is skin irritation
- iontophoresis: particularly useful for patients with palmar, plantar and axillary hyperhidrosis
- botulinum toxin: currently licensed for axillary symptoms
- surgery: e.g. Endoscopic transthoracic sympathectomy. Patients should be made aware of the risk of compensatory sweating

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)
Hyperhidrosis guidelines

Question 32 of 131



A 47-year-old man who is known to have dermatomyositis secondary to small cell lung cancer is noted to have roughened red papules over the extensor surfaces of the fingers. What are these lesions called?

- A. Heberden's node
- B. Aschoff nodules
- C. **Gottron's papules**
- D. Bouchard's nodes
- E. Muehrcke's lines



Question stats

A	4%
B	21.5%
C	67.4%
D	5.4%
E	1.7%

67.4% of users answered this question correctly

Session score = 43.8%

Gottron's papules are roughened red papules over the extensor surfaces and are seen in dermatomyositis

Heberden's and Bouchard's nodes are seen in osteoarthritis. Aschoff nodules are pathognomonic of rheumatic fever whilst Muehrcke's lines are white, transverse lines of the fingernail seen in hypoalbuminaemia

Dermatomyositis

Overview

- inflammatory disorder causing symmetrical, proximal muscle weakness and characteristic skin lesions
- may be idiopathic or associated with connective tissue disorders or underlying malignancy (found in 20-25% - more if patient older)
- polymyositis is a variant of the disease where skin manifestations are not prominent

Skin features

- photosensitive
- macular rash over back and shoulder
- heliotrope rash in the periorbital region
- Gottron's papules - roughened red papules over extensor surfaces of fingers
- nail fold capillary dilatation

Other features

- proximal muscle weakness +/- tenderness
- Raynaud's
- respiratory muscle weakness
- interstitial lung disease: e.g. Fibrosing alveolitis or organising pneumonia
- dysphagia, dysphonia

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

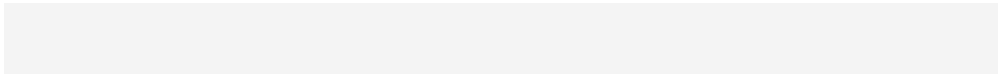
[DermNet NZ](#)

Picture of heliotrope rash

[DermNet NZ](#)

Picture of Gottron's papules

Rate question:



All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 13 of 231



A 34-year-old man with a long history of back pain asks you to have a look at his back. His wife has noticed a rash.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?



A. Pityriasis rosea

B. Erythema multiforme



C. Erythema ab igne

D. Pityriasis versicolor

E. Cold urticaria

This is a typical erythema ab igne rash. He may have been applying a hot water bottle to his lower back to try and relieve the pain.

Erythema ab igne

Question stats

A	3%
B	5.8%
C	78%
D	8.8%
E	4.4%

78% of users answered this question correctly

Session score = 46.2%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema ab igne

Erythema ab igne is a skin disorder caused by over exposure to infrared radiation. Characteristic features include erythematous patches with hyperpigmentation and telangiectasia. A typical history would be an elderly women who always sits next to an open fire

If the cause is not treated then patients may go on to develop squamous cell skin cancer

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 33 of 131



A 64-year-old female is referred to dermatology due to a non-healing skin ulcer on her lower leg. This has been present for around 6 weeks and the appearance didn't improve following a course of oral flucloxacillin. What is the most important investigation to perform first?

- A. MRI
- B. Rheumatoid factor titres
- C. **Ankle-brachial pressure index**
- D. Swab of ulcer for culture and sensitivity
- E. X-ray



Question stats

A	0.6%
B	0.4%
C	86.8%
D	9.4%
E	2.9%

86.8% of users answered this question correctly

Session score = 45.5%

An ankle-brachial pressure index measurement would help exclude arterial insufficiency as a contributing factor. If this was abnormal then a referral to the vascular surgeons should be considered.

If the ulcer fails to heal with active management (e.g. Compression bandaging) then referral for consideration of biopsy to exclude a malignancy should be made.

Ongoing infection is not a common cause of non-healing leg ulcers.

Venous ulceration

Venous ulceration is typically seen above the medial malleolus

Investigations

- ankle-brachial pressure index (ABPI) is important in non-healing ulcers to assess for poor arterial flow which could impair healing
- a 'normal' ABPI may be regarded as between 0.9 - 1.2. Values below 0.9 indicate arterial disease. Interestingly, values above 1.3 may also indicate arterial disease, in the form of false-negative results secondary to arterial calcification (e.g. In diabetics)

Management

- compression bandaging, usually four layer (only treatment shown to be of real benefit)
- oral pentoxifylline, a peripheral vasodilator, improves healing rate
- small evidence base supporting use of flavinoids
- little evidence to suggest benefit from hydrocolloid dressings, topical growth factors, ultrasound therapy and intermittent pneumatic compression

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[BMJ](#)

Management of venous leg ulcers

Question 34 of 131



Please look at the image below:



Image used on license from [DermNet NZ](#)



Which one of the following is least likely to have a role in the management of this patient?

- A. Sun block
- B. Topical tacrolimus
- C. Phototherapy
- ☒ D. Topical ketoconazole
- E. Topical corticosteroids

There is no role for antifungal therapy in vitiligo.

Vitiligo

Vitiligo is an autoimmune condition which results in the loss of melanocytes and consequent depigmentation of the skin. It is thought to affect around 1% of the population and symptoms typically develop by the age of 20-30 years.

Features

- well demarcated patches of depigmented skin
- the peripheries tend to be most affected
- trauma may precipitate new lesions (Koebner phenomenon)

Question stats

A	5.1%
B	6.1%
C	18.6%
D	62%
E	8.3%

62% of users answered this question correctly

Session score = 47.1%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Vitiligo

Associated conditions

- type 1 diabetes mellitus
- Addison's disease
- autoimmune thyroid disorders
- pernicious anaemia
- alopecia areata

Management

- sun block for affected areas of skin
- camouflage make-up
- topical corticosteroids may reverse the changes if applied early
- there may also be a role for topical tacrolimus and phototherapy, although caution needs to be exercised with light-skinned patients

Rate question:

Question 35 of 131



A 19-year-old man presents with the following lesions on his leg. They are mildly pruritic.



Two weeks later he develops numerous other lesions on his body. What is the most likely diagnosis?

- A. Guttate psoriasis
- B. Pityriasis versicolor
- C. Chronic plaque psoriasis
- D. Dermatitis herpetiformis
- ✓ E. Pityriasis rosea

Question stats

A	16.4%
B	12.8%
C	9.8%
D	8.9%
E	52.1%

52.1% of users answered this question correctly

Session score = 48.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of pityriasis rosea

Pityriasis rosea

Overview

- cause unknown, herpes hominis virus 7 (HHV-7) a possibility
- tends to affect young adults

Features

- herald patch (usually on trunk)
- followed by erythematous, oval, scaly patches which follow a characteristic distribution with the longitudinal diameters of the oval lesions running parallel to the line of Langer. This may produce a 'fir-tree' appearance

Management

- self-limiting, usually disappears after 4-6 weeks

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 36 of 131



A 15-year-old girl presents with an urticarial rash, angioedema and wheezing. Her mother states that she has just come from her younger sister's party where she had been helping to blow up balloons. What is the most likely diagnosis?

- A. C1-esterase deficiency (hereditary angioedema)
- B. Allergic contact dermatitis
- C. Peanut allergy
- D. Latex allergy
- E. Irritant contact dermatitis



This is a typical history of latex allergy. Adrenaline should be given immediately and usual anaphylaxis management followed

Hypersensitivity

The Gell and Coombs classification divides hypersensitivity reactions into 4 types

Type I - Anaphylactic

- antigen reacts with IgE bound to mast cells
- anaphylaxis, atopy

Type II - Cell bound

- IgG or IgM binds to antigen on cell surface
- autoimmune haemolytic anaemia, ITP, Goodpasture's

Type III - Immune complex

- free antigen and antibody (IgG, IgA) combine
- serum sickness, systemic lupus erythematosus, post-streptococcal glomerulonephritis, extrinsic allergic alveolitis (especially acute phase)

Type IV - Delayed hypersensitivity

- T cell mediated
- tuberculosis, tuberculin skin reaction, graft versus host disease, allergic contact dermatitis, scabies, extrinsic allergic alveolitis (especially chronic phase)

In recent times a further category has been added:

Type V - Stimulated hypersensitivity

- IgG antibodies stimulate cells they are directed against

Question stats

A	3.5%
B	3.7%
C	3.5%
D	88.5%
E	0.8%

88.5% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Graves', myasthenia gravis

Rate question:

Question 37 of 131



This woman complains of a 'rash' on her cheeks:



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Vitiligo
- B. Seborrhoeic dermatitis
- C. Acne rosacea
- ☒ D. Melasma
- ☐ E. Systemic lupus erythematosus

Question stats

A	19.2%
B	0.9%
C	5.2%
D	67.1%
E	7.6%

67.1% of users answered this question correctly

Session score = 48.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Melasma

Melasma is a condition associated with the development of hyperpigmented macules in sun-exposed areas, particularly the face. The term chloasma is sometimes used interchangeably but more specifically describes the appearance of melasma during pregnancy.

Epidemiology

- more common in women
- more common in people with darker skin

Causes

- pregnancy
- combined oral contraceptive pill

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 38 of 131



The lesion below started as a small red papule which grew in size before starting to ulcerate:



Image used on license from [DermNet NZ](#)



Which one of the following conditions is most associated with this skin condition?



A. Rheumatoid arthritis



B. Sarcoidosis

C. Primary herpes simplex virus infection

D. Tuberculosis

E. Thyrotoxicosis

Question stats

A	<div></div>	47%
B	<div></div>	34.9%
C	<div></div>	4.6%
D	<div></div>	8.9%
E	<div></div>	4.7%

47% of users answered this question correctly

Session score = 47.4%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of pyoderma gangrenosum

[DermNet NZ](#)

Stoma skin problems

Pyoderma gangrenosum

Features

- typically on the lower limbs
- initially small red papule
- later deep, red, necrotic ulcers with a violaceous border
- may be accompanied systemic symptoms e.g. Fever, myalgia

Causes*

- idiopathic in 50%
- inflammatory bowel disease: ulcerative colitis, Crohn's

- rheumatoid arthritis, SLE
- myeloproliferative disorders
- lymphoma, myeloid leukaemias
- monoclonal gammopathy (IgA)
- primary biliary cirrhosis

Management

- the potential for rapid progression is high in most patients and most doctors advocate oral steroids as first-line treatment
- other immunosuppressive therapy, for example ciclosporin and infliximab, have a role in difficult cases

*note whilst pyoderma gangrenosum can occur in diabetes mellitus it is rare and is generally not included in a differential of potential causes

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 39 of 131



A 29-year-old man consults you regarding a rash he has noticed around his groin. It has been present for the past 3 months and is asymptomatic. On examination there is a symmetrical well-demarcated, brown-red macular rash around the groin. What is the most likely diagnosis?



- A. Erythrasma
- B. Pityriasis versicolor
- C. Secondary syphilis
- D. Acanthosis nigricans
- E. Candidal intertrigo



Question stats

A	<div style="width: 38%;"></div>	38%
B	<div style="width: 14.9%;"></div>	14.9%
C	<div style="width: 2.6%;"></div>	2.6%
D	<div style="width: 23.7%;"></div>	23.7%
E	<div style="width: 20.8%;"></div>	20.8%

38% of users answered this question correctly

Session score = 46.2%

Erythrasma

Erythrasma is a generally asymptomatic, flat, slightly scaly, pink or brown rash usually found in the groin or axillae. It is caused by an overgrowth of the diphtheroid *Corynebacterium minutissimum*

Examination with Wood's light reveals a coral-red fluorescence.

Topical miconazole or antibacterial are usually effective. Oral erythromycin may be used for more extensive infection

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links



[DermNet NZ](#)

Erythrasma






Question 40 of 131



Which one of the following statements regarding fungal nail infections is incorrect?

- A. *Candida* accounts for less than 10% of cases
-  B. **Diagnosis should be confirmed by microbiology before starting treatment**
-  C. **Treatment is successful in around 90-95% of people**
- D. Thickened, rough, opaque nails are typical
- E. Suitable investigations include nail clippings

Question stats

A		10.4%
B		14.7%
C		70.9%
D		2%
E		1.9%

70.9% of users answered this question correctly

Session score = 45%

Fungal nail infections

Onychomycosis is fungal infection of the nails. This may be caused by

- dermatophytes - mainly *Trichophyton rubrum*, accounts for 90% of cases
- yeasts - such as *Candida*
- non-dermatophyte moulds

Features

- 'unsightly' nails are a common reason for presentation
- thickened, rough, opaque nails are the most common finding

Investigation

- nail clippings
- scrapings of the affected nail

Management

- treatment is successful in around 50-80% of people
- diagnosis should be confirmed by microbiology before starting treatment
- dermatophyte infection: oral terbinafine is currently recommended first-line with oral itraconazole as an alternative. Six weeks - 3 months therapy is needed for fingernail infections whilst toenails should be treated for 3 - 6 months
- *Candida* infection: mild disease should be treated with topical antifungals (e.g. Amorolfine) whilst more severe infections should be treated with oral itraconazole for a period of 12 weeks

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Fungal nail infections

Rate question:

Questions 41 to 43 of 131



Theme: Acne vulgaris: management

- A** Oral trimethoprim
- B** Oral flucloxacillin
- C** Topical benzoyl peroxide
- D** Topical zinc + erythromycin
- E** Oral isotretinoin
- F** Oral lymecycline
- G** Oral minocycline
- H** Oral erythromycin

For each one of the following questions please select the correct answer from the options listed above:

- 41.** Should be avoided due to an increased risk of drug-induced lupus and hyperpigmentation



Oral trimethoprim

The correct answer is Oral minocycline

- 42.** Is most likely to affect the hepatic metabolism of other medications



Oral erythromycin

Erythromycin is an inhibitor of the P450 system.

- 43.** Patients should be warned about photosensitivity



Topical benzoyl peroxide

The correct answer is Oral lymecycline

Care should be taken with topical retinoids as well. Photosensitivity with oral isotretinoin is listed as a 'very rare' side-effect in the BNF, the last of a very long list of side-effects.

Question stats

Average score for registered users:

41		70.1%
42		41.7%
43		48.3%

Session score = 44.2%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Acne vulgaris guidelines

Acne vulgaris is a common skin disorder which usually occurs in adolescence. It typically affects the face, neck and upper trunk and is characterised by the obstruction of the pilosebaceous follicles with keratin plugs which results in comedones, inflammation and pustules.

Acne may be classified into mild, moderate or severe:

- mild: open and closed comedones with or without sparse inflammatory lesions
- moderate acne: widespread non-inflammatory lesions and numerous papules and pustules
- severe acne: extensive inflammatory lesions, which may include nodules, pitting, and scarring

A simple step-up management scheme often used in the treatment of acne is as follows:

- single topical therapy (topical retinoids, benzyl peroxide)
- topical combination therapy (topical antibiotic, benzoyl peroxide, topical retinoid)
- oral antibiotics: e.g. Oxytetracycline, doxycycline. Improvement may not be seen for 3-4 months. Minocycline is now considered less appropriate due to the possibility of irreversible pigmentation. Gram negative folliculitis may occur as a complication of long-term antibiotic use - high-dose oral trimethoprim is effective if this occurs
- oral isotretinoin: only under specialist supervision

There is no role for dietary modification in patients with acne

Rate question:

Question 44 of 131



Which of the following skin conditions is not associated with diabetes mellitus?



- A. Necrobiosis lipoidica
- B. Sweet's syndrome
- C. Granuloma annulare
- D. Vitiligo
- E. Lipoatrophy

Sweet's syndrome is also known as acute febrile neutrophilic dermatosis has a strong association with acute myeloid leukaemia. It is not associated with diabetes mellitus

Skin disorders associated with diabetes

Note whilst pyoderma gangrenosum can occur in diabetes mellitus it is rare and is often not included in a differential of potential causes

Necrobiosis lipoidica

- shiny, painless areas of yellow/red/brown skin typically on the shin
- often associated with surrounding telangiectasia

Infection

- candidiasis
- staphylococcal

Neuropathic ulcers

Vitiligo

Lipoatrophy

Granuloma annulare*

- papular lesions that are often slightly hyperpigmented and depressed centrally

*it is not clear from recent studies if there is actually a significant association between diabetes mellitus and granuloma annulare, but it is often listed in major textbooks

Question stats

A	2.1%
B	72.2%
C	12.3%
D	8.6%
E	4.8%

72.2% of users answered this question correctly

Session score = 43.2%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of necrobiosis lipoidica

[DermNet NZ](#)

Picture of granuloma annulare

Rate question:

Question 14 of 231



A woman who is 31 weeks pregnant presents with a rash on her abdomen and thighs:



Image used on license from [DermNet NZ](#)

The rash is very itchy and she is having difficulty sleeping at night. What is the most likely diagnosis?

- A. Primary herpes simplex infection
- B. Pityriasis rosea
- ✓ C. Polymorphic eruption of pregnancy
- ✗ D. Pemphigoid gestationis
- E. Pompholyx

Question stats

A	0.9%
B	4.6%
C	79.4%
D	13.3%
E	1.8%

79.4% of users answered this question correctly

Session score = 42.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Polymorphic eruption of pregnancy

[DermNet NZ](#)

Pemphigoid gestationis

Polymorphic eruption of pregnancy

- pruritic condition associated with last trimester
- lesions often first appear in abdominal striae
- management depends on severity: emollients, mild potency topical steroids and oral steroids may be used

Pemphigoid gestationis

- pruritic blistering lesions
- often develop in peri-umbilical region, later spreading to the trunk, back, buttocks and arms
- usually presents 2nd or 3rd trimester and is rarely seen in the first pregnancy
- oral corticosteroids are usually required

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 45 of 131



Which one of the following antibiotics is most associated with the development of Stevens-Johnson syndrome?



A. Co-trimoxazole

B. Ethambutol

C. Chloramphenicol



D. Ciprofloxacin

E. Gentamicin

Question stats

A	<div style="width: 59.3%;"></div>	59.3%
B	<div style="width: 5.7%;"></div>	5.7%
C	<div style="width: 11.5%;"></div>	11.5%
D	<div style="width: 18.6%;"></div>	18.6%
E	<div style="width: 5%;"></div>	5%

59.3% of users answered this question correctly

Session score = 42.2%

Stevens-Johnson syndrome

Stevens-Johnson syndrome severe form of erythema multiforme associated with mucosal involvement and systemic symptoms

Features

- rash is typically maculopapular with target lesions being characteristic. May develop into vesicles or bullae
- mucosal involvement
- systemic symptoms: fever, arthralgia

Causes

- idiopathic
- bacteria: Mycoplasma, Streptococcus
- viruses: herpes simplex virus, Orf
- drugs: penicillin, sulphonamides, carbamazepine, allopurinol, NSAIDs, oral contraceptive pill
- connective tissue disease e.g. SLE
- sarcoidosis
- malignancy

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

Question 46 of 131



A 55-year-old man develops a rash two days after starting a new medication. The rash is mildly pruritic and mainly affects the arms, torso and neck. The palms of his hand are shown below:



Image used on license from [DermNet NZ](#)



Which one of the following drugs is most likely to have been started?

- A. Levetiracetam
- B. Olanzapine
- ☒ C. Carbamazepine
- D. Fluoxetine
- E. Diazepam

This patient has developed erythema multiforme which is a known complication of carbamazepine use.

Erythema multiforme

Features

- target lesions
- initially seen on the back of the hands / feet before spreading to the torso
- upper limbs are more commonly affected than the lower limbs
- pruritus is occasionally seen and is usually mild

If symptoms are severe and involve blistering and mucosal involvement the term

Question stats

A	9.8%
B	12.8%
C	67.7%
D	8.7%
E	1%

67.7% of users answered this question correctly

Session score = 43.5%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema multiforme

Stevens-Johnson syndrome is used.

Causes

- viruses: herpes simplex virus (the most common cause), Orf*
- idiopathic
- bacteria: *Mycoplasma*, *Streptococcus*
- drugs: penicillin, sulphonamides, carbamazepine, allopurinol, NSAIDs, oral contraceptive pill, nevirapine
- connective tissue disease e.g. Systemic lupus erythematosus
- sarcoidosis
- malignancy

*Orf is a skin disease of sheep and goats caused by a parapox virus

Rate question:

Question 47 of 131



A 53-year-old diabetic woman presents with a four month history of bilateral erythematous lesions on her shins surrounded by telangiectasia. What is the most likely diagnosis?



A. Erythema nodosum

B. Neuropathic ulcer

C. Candidiasis



D. Necrobiosis lipoidica

E. Granuloma annulare

Erythema nodosum is not associated with surrounding telangiectasia

Skin disorders associated with diabetes

Note whilst pyoderma gangrenosum can occur in diabetes mellitus it is rare and is often not included in a differential of potential causes

Necrobiosis lipoidica

- shiny, painless areas of yellow/red/brown skin typically on the shin
- often associated with surrounding telangiectasia

Infection

- candidiasis
- staphylococcal

Neuropathic ulcers

Vitiligo

Lipoatrophy

Granuloma annulare*

- papular lesions that are often slightly hyperpigmented and depressed centrally

*it is not clear from recent studies if there is actually a significant association between diabetes mellitus and granuloma annulare, but it is often listed in major textbooks

Rate question:

Question stats

A		17.8%
B		0.6%
C		0.2%
D		71.3%
E		10.1%

71.3% of users answered this question correctly

Session score = 42.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of necrobiosis lipoidica

[DermNet NZ](#)

Picture of granuloma annulare

Question 48 of 131





This patient complains of a painful 'spot' on his ear:



Image used on license from [DermNet NZ](#)



Which one of the following statements regarding this condition is correct?

- A. It is twice as common in women as in men
- B. The peak incidence is in patients aged 40-50 years
- C. It is more common in patients with diabetes mellitus
-  D. Biopsy is mandatory
-  E. Cryotherapy is a treatment option

Question stats

A	2.9%
B	10.7%
C	12.2%
D	26.1%
E	48.1%

48.1% of users answered this question correctly

Session score = 41.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Chondrodermatitis nodularis helicis

Chondrodermatitis nodularis helicis (CNH) is a common and benign condition characterised by the development of a painful nodule on the ear. It is thought to be caused by factors such as persistent pressure on the ear (e.g. secondary to sleep, headsets), trauma or cold. CNH is more common in men and with increasing age.

Management

- reducing pressure on the ear: foam 'ear protectors' may be used during sleep
- other treatment options include cryotherapy, steroid injection, collagen

- injection
- surgical treatment may be used but there is a high recurrence rate

Rate question:

Question 49 of 131



A 62-year-old female is referred to dermatology by her GP due to a lesion over her shin. It initially started as a small red papule which later became a deep, red, necrotic ulcers with a violaceous border. What is the likely diagnosis?

- A. Necrobiosis lipoidica diabetorum
- B. Syphilis
- C. Erythema nodosum
- D. Pretibial myxoedema
- E. **Pyoderma gangrenosum**



Question stats

A		6.3%
B		0.2%
C		2.5%
D		1.2%
E		89.8%

89.8% of users answered this question correctly

Session score = 42.9%

Shin lesions

The differential diagnosis of shin lesions includes the following conditions:

- erythema nodosum
- pretibial myxoedema
- pyoderma gangrenosum
- necrobiosis lipoidica diabetorum

Below are the characteristic features:

Erythema nodosum

- symmetrical, erythematous, tender, nodules which heal without scarring
- most common causes are streptococcal infections, sarcoidosis, inflammatory bowel disease and drugs (penicillins, sulphonamides, oral contraceptive pill)

Pretibial myxoedema

- symmetrical, erythematous lesions seen in Graves' disease
- shiny, orange peel skin

Pyoderma gangrenosum

- initially small red papule
- later deep, red, necrotic ulcers with a violaceous border
- idiopathic in 50%, may also be seen in inflammatory bowel disease, connective tissue disorders and myeloproliferative disorders

Necrobiosis lipoidica diabetorum

- shiny, painless areas of yellow/red skin typically on the shin of diabetics

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of erythema nodosum

[DermIS.net](#)

Picture of pretibial myxoedema

[DermNet NZ](#)

Picture of pyoderma gangrenosum

[DermNet NZ](#)

Picture of necrobiosis lipoidica

often associated with telangiectasia

Rate question:

Question 50 of 131



A 65-year-old woman with blistering lesions on her leg is suspected of having bullous pemphigoid. What is the most appropriate management?



- A. Trial of topical corticosteroids and review in 2 weeks
- B. Refer to secondary care
- C. Blood tests + chest x-ray + breast exam and refer to district nurse for dressings
- D. Reassurance and refer to district nurse for dressings
- E. Topical Permethrin 5%

Question stats

A	<div></div>	23.5%
B	<div></div>	66.7%
C	<div></div>	3.8%
D	<div></div>	5.4%
E	<div></div>	0.7%

66.7% of users answered this question correctly

Session score = 42%

Bullous pemphigoid

Bullous pemphigoid is an autoimmune condition causing sub-epidermal blistering of the skin. This is secondary to the development of antibodies against hemidesmosomal proteins BP180 and BP230

Bullous pemphigoid is more common in elderly patients. Features include

- itchy, tense blisters typically around flexures
- the blisters usually heal without scarring
- mouth is usually spared*

Skin biopsy

- immunofluorescence shows IgG and C3 at the dermoepidermal junction

Management

- referral to dermatologist for biopsy and confirmation of diagnosis
- oral corticosteroids are the mainstay of treatment
- topical corticosteroids, immunosuppressants and antibiotics are also used

*in reality around 10-50% of patients have a degree of mucosal involvement. It would however be unusual for an exam question to mention mucosal involvement as it is seen as a classic differentiating feature between pemphigoid and pemphigus.

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Bullous pemphigoid


[British Association of Dermatologists](#)

Bullous pemphigoid guidelines

Question 1 of 81



A 33-year-old woman presents to her GP with patchy, well demarcated hair loss on the scalp. This is affecting around 20% of her total scalp, and causing significant psychological distress. A diagnosis of alopecia areata is suspected. Which one of the following is an appropriate management plan?

- A. Topical 5-FU cream + referral to dermatologist
- B. Autoimmune screen + topical corticosteroid
- C. Topical ketoconazole + referral to dermatologist
-  D. **Topical corticosteroid + referral to dermatologist**
- E. Autoimmune screen + topical ketoconazole

Watchful waiting for spontaneous remission is another option. Neither the British Association of Dermatologists or Clinical Knowledge Summaries recommend screening for autoimmune disease

Alopecia areata

Alopecia areata is a presumed autoimmune condition causing localised, well demarcated patches of hair loss. At the edge of the hair loss, there may be small, broken 'exclamation mark' hairs

Hair will regrow in 50% of patients by 1 year, and in 80-90% eventually. Careful explanation is therefore sufficient in many patients. Other treatment options include:

- topical or intralesional corticosteroids
- topical minoxidil
- phototherapy
- dithranol
- contact immunotherapy
- wigs

Rate question:

Question stats

A		8.1%
B		21.6%
C		12.7%
D		50.8%
E		6.8%

50.8% of users answered this question correctly

Session score = 100%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)



Alopecia areata guidelines

[Clinical Knowledge Summaries](#)
Alopecia areata guidelines

Question 2 of 81



A 45-year-old man with a history of seborrhoeic dermatitis presents in late winter due a flare in his symptoms, affecting both his face and scalp. Which one of the following agents is least likely to be beneficial?

- A. Topical ketoconazole
- B. Selenium sulphide shampoo
-  C. Topical hydrocortisone
- D. Tar shampoo
-  E. Aqueous cream

There is less of a role for emollients in the management of seborrhoeic dermatitis than in other chronic skin disorders

Seborrhoeic dermatitis in adults

Seborrhoeic dermatitis in adults is a chronic dermatitis thought to be caused by an inflammatory reaction related to a proliferation of a normal skin inhabitant, a fungus called *Malassezia furfur* (formerly known as *Pityrosporum ovale*). It is common, affecting around 2% of the general population

Features

- eczematous lesions on the sebum-rich areas: scalp (may cause dandruff), periorbital, auricular and nasolabial folds
- otitis externa and blepharitis may develop

Associated conditions include

- HIV
- Parkinson's disease

Scalp disease management






- over the counter preparations containing zinc pyrithione ('Head & Shoulders') and tar ('Neutrogena T/Gel') are first-line
- the preferred second-line agent is ketoconazole
- selenium sulphide and topical corticosteroid may also be useful

Face and body management

- topical antifungals: e.g. Ketoconazole
- topical steroids: best used for short periods
- difficult to treat - recurrences are common

Rate question:

Question stats

A		9.8%
B		5.5%
C		15.9%
D		21.2%
E		47.5%

47.5% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

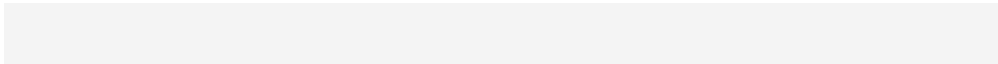
External links

[DermNet NZ](#)

Overview and pictures of seborrhoeic dermatitis

[Clinical Knowledge Summaries](#)

Seborrhoeic dermatitis guidelines



Question 3 of 81



A 27-year-old female presents with spots around her left eye:



Question stats

A	3.6%
B	79.9%
C	2.4%
D	8.5%
E	5.5%

79.9% of users answered this question correctly

Session score = 66.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

What is the most likely diagnosis?



- A. Meibomian cysts
- B. Milia
- C. Hordeolum externum
- D. Molluscum contagiosum
- E. Acne conglobata

Milia


Milia are small, benign, keratin-filled cysts that typically appear around the face. They may appear at any age but are more common in newborns.

Rate question:






Question 4 of 81



A 17-year-old female originally from Nigeria presents due to a swelling around her earlobe. She had her ears pierced around three months ago and has noticed the gradual development of an erythematous swelling since. On examination a keloid scar is seen. What is the most appropriate management?

- A. Refer for intralesional diclofenac
- B. Advise no treatment is available
-  C. Refer for intralesional triamcinolone
- D. Advise will spontaneously regress within 4-6 months
- E. Refer for intralesional sclerotherapy

Question stats

A		8%
B		6.7%
C		67%
D		6.5%
E		11.7%

67% of users answered this question correctly

Session score = 75%

Keloid scars

Keloid scars are tumour-like lesions that arise from the connective tissue of a scar and extend beyond the dimensions of the original wound

Predisposing factors

- ethnicity: more common in people with dark skin
- occur more commonly in young adults, rare in the elderly
- common sites (in order of decreasing frequency): sternum, shoulder, neck, face, extensor surface of limbs, trunk

Keloid scars are less likely if incisions are made along relaxed skin tension lines*

Treatment

- early keloids may be treated with intra-lesional steroids e.g. triamcinolone
- excision is sometimes required

*Langer lines were historically used to determine the optimal incision line. They were based on procedures done on cadavers but have been shown to produce worse cosmetic results than when following skin tension lines

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 15 of 231



A 24-year-old man with a history of ulcerative colitis presents due to an expanding 'blood blister' on his lower leg:



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Pyogenic granuloma
- B. Arterial leg ulcer
- C. Necrotising fasciitis
- D. Venous leg ulcer
- ✓ E. **Pyoderma gangrenosum**

Question stats

A	12.2%
B	0.6%
C	2.7%
D	1.4%
E	83%

83% of users answered this question correctly

Session score = 46.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of pyoderma gangrenosum

[DermNet NZ](#)

Stoma skin problems

Pyoderma gangrenosum

Features

- typically on the lower limbs
- initially small red papule
- later deep, red, necrotic ulcers with a violaceous border
- may be accompanied systemic symptoms e.g. Fever, myalgia

Causes*

- idiopathic in 50%

- inflammatory bowel disease: ulcerative colitis, Crohn's
- rheumatoid arthritis, SLE
- myeloproliferative disorders
- lymphoma, myeloid leukaemias
- monoclonal gammopathy (IgA)
- primary biliary cirrhosis

Management

- the potential for rapid progression is high in most patients and most doctors advocate oral steroids as first-line treatment
- other immunosuppressive therapy, for example ciclosporin and infliximab, have a role in difficult cases

*note whilst pyoderma gangrenosum can occur in diabetes mellitus it is rare and is generally not included in a differential of potential causes


Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 5 of 81



A 31-year-old female with polycystic ovarian syndrome consults you as she is troubled with excessive facial hair. Switching her combined oral contraceptive pill to co-cyprindiol has had no effect. On examination she has hirsutism affecting her moustache, beard, and temple areas. What is the most appropriate treatment?

- A. Topical salicylic acid
- B. Topical adapalene
- C. Oral clomifene
-  D. Topical eflornithine
- E. Topical tazarotene

Question stats

A	2.9%
B	10.1%
C	16.3%
D	66.7%
E	4%

66.7% of users answered this question correctly

Session score = 80%

Polycystic ovarian syndrome: management

Polycystic ovarian syndrome (PCOS) is a complex condition of ovarian dysfunction thought to affect between 5-20% of women of reproductive age. Management is complicated and problem based

General

- weight reduction if appropriate
- if a women requires contraception then a combined oral contraceptive (COC) pill may help regulate her cycle and induce a monthly bleed (see below)

Hirsutism and acne

- a COC pill may be used help manage hirsutism. Possible options include a third generation COC which has fewer androgenic effects or co-cyprindiol which has an anti-androgen action. Both of these types of COC may carry an increased risk of venous thromboembolism
- if doesn't respond to COC then topical eflornithine may be tried
- spironolactone, flutamide and finasteride may be used under specialist supervision

Infertility

- weight reduction if appropriate
- the management of infertility in patients with PCOS should be supervised by a specialist. There is an ongoing debate as to whether metformin, clomifene or a combination should be used to stimulate ovulation
- a 2007 trial published in the New England Journal of Medicine suggested clomifene was the most effective treatment. There is a potential risk of multiple pregnancies with anti-oestrogen* therapies such as clomifene

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[NEJM](#)

Summary of recent trial comparing metformin to clomifene

metformin is also used, either combined with clomifene or alone, particularly in patients who are obese

- gonadotrophins

*work by occupying hypothalamic oestrogen receptors without activating them.
This interferes with the binding of oestradiol and thus prevents negative feedback inhibition of FSH secretion

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 6 of 81


Which one of the following is least likely to cause a bullous rash?

- A. Furosemide
- B. Friction
- ✓ C. Lichen planus
- ✗ D. Insect bite
- E. Epidermolysis bullosa

Question stats

A	<div></div>	14.3%
B	<div></div>	7.8%
C	<div></div>	69.6%
D	<div></div>	3.8%
E	<div></div>	4.5%

69.6% of users answered this question correctly

Session score = 66.7%

The bullous variant of lichen planus is extremely rare

Bullous disorders

Causes of skin bullae

- congenital: epidermolysis bullosa
- autoimmune: bullous pemphigoid, pemphigus
- insect bite
- trauma/friction
- drugs: barbiturates, furosemide

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 7 of 81



Which one of the following steroid creams is classified as moderately potent?

- ✓ A. Eumovate
- B. Cutivate
- ✗ C. Betnovate
- D. Hydrocortisone 1%
- E. Dermovate

Question stats

A	<div></div>	57.3%
B	<div></div>	6.1%
C	<div></div>	31.9%
D	<div></div>	0.6%
E	<div></div>	4.1%

57.3% of users answered this question correctly

Session score = 57.1%

Eczema: topical steroids

Use weakest steroid cream which controls patients symptoms

The table below shows topical steroids by potency

Mild	Moderate	Potent	Very potent
Hydrocortisone 0.5-2.5%	Betamethasone valerate 0.025% (Betnovate RD) Clobetasone butyrate 0.05% (Eumovate)	Fluticasone propionate 0.05% (Cutivate) Betamethasone valerate 0.1% (Betnovate)	Clobetasol propionate 0.05% (Dermovate)

Finger tip rule

- 1 finger tip unit (FTU) = 0.5 g, sufficient to treat a skin area about twice that of the flat of an adult hand

Topical steroid doses for eczema in adults

Area of skin	Fingertip units per dose
Hand and fingers (front and back)	1.0
A foot (all over)	2.0
Front of chest and abdomen	7.0
Back and buttocks	7.0
Face and neck	2.5
An entire arm and hand	4.0
An entire leg and foot	8.0

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

Atopic eczema guidelines

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 8 of 81



Which one of the following statements regarding pressure ulcers is true?

- A. The most common site is above the medial malleolus
- X** B. Most patients have a history of peripheral arterial disease
- C. Wounds should be regularly swabbed to exclude infection
- D. Cleaning the ulcer with soap and water should be encouraged
- ✓** E. A moist wound environment encourages ulcer healing

Question stats

A	10.6%
B	11%
C	5.5%
D	6.4%
E	66.5%

66.5% of users answered this question correctly

Session score = 50%

Pressure ulcers

The following is based on a 2009 NHS Best Practice Statement. Please see the link for further details. Some selected points are listed below. NICE also published guidelines in 2005.

Pressure ulcers develop in patients who are unable to move parts of their body due to illness, paralysis or advancing age. They typically develop over bony prominences such as the sacrum or heel. The following factors predispose to the development of pressure ulcers:

- malnourishment
- incontinence
- lack of mobility
- pain (leads to a reduction in mobility)

Grading of pressure ulcers - the following is taken from the European Pressure Ulcer Advisory Panel classification system.

Grade 1	Non-blanchable erythema of intact skin. Discolouration of the skin, warmth, oedema, induration or hardness may also be used as indicators, particularly on individuals with darker skin
Grade 2	Partial thickness skin loss involving epidermis or dermis, or both. The ulcer is superficial and presents clinically as an abrasion or blister
Grade 3	Full thickness skin loss involving damage to or necrosis of subcutaneous tissue that may extend down to, but not through, underlying fascia.
Grade 4	Extensive destruction, tissue necrosis, or damage to muscle, bone or supporting structures with or without full thickness skin loss

Management

- a moist wound environment encourages ulcer healing. Hydrocolloid dressings and hydrogels may help facilitate this. The use of soap should be discouraged to avoid drying the wound

RCGP curriculum

9 - Care of Older Adults

[Curriculum statement](#)

External links

[NHS](#)

Prevention and management of pressure ulcers

[NICE](#)

The prevention and treatment of pressure ulcers

- wound swabs should not be done routinely as the vast majority of pressure ulcers are colonised with bacteria. The decision to use systemic antibiotics should be taken on a clinical basis (e.g. Evidence of surrounding cellulitis)
- consider referral to the tissue viability nurse
- surgical debridement may be beneficial for selected wounds

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 9 of 81



A 23-year-old man presents with an itchy skin condition. Which one of the following is not part of the UK Working Party Diagnostic Criteria for atopic eczema?



- A. History of asthma
- B. Responds to topical steroids
- C. History of flexural involvement
- D. Onset below age 2 years
- E. History of generally dry skin

Whilst response to topical steroids provides useful clinical information it is not part of the diagnostic criteria. A wide variety of skin conditions can improve with topical steroid therapy.

Eczema: diagnosis

UK Working Party Diagnostic Criteria for Atopic Eczema

An itchy skin condition in the last 12 months

Plus three or more of

- onset below age 2 years*
- history of flexural involvement**
- history of generally dry skin
- personal history of other atopic disease***
- visible flexural dermatitis

*not used in children under 4 years

**or dermatitis on the cheeks and/or extensor areas in children aged 18 months or under

***in children aged under 4 years, history of atopic disease in a first degree relative may be included

Rate question:

Question stats

A	3.2%
B	39.3%
C	7.7%
D	23%
E	26.7%

39.3% of users answered this question correctly

Session score = 44.4%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

Atopic eczema guidelines

Question 10 of 81



A farmer presents with a tender lesion on his finger:



What is the most likely diagnosis?



A. Paronychia



B. Orf

C. Tetanus

D. Anthrax

E. Hand, foot and mouth disease

Question stats

A	<div style="width: 25.7%;"></div>	25.7%
B	<div style="width: 67.4%;"></div>	67.4%
C	<div style="width: 0.5%;"></div>	0.5%
D	<div style="width: 4.7%;"></div>	4.7%
E	<div style="width: 1.6%;"></div>	1.6%

67.4% of users answered this question correctly

Session score = 40%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Orf

Orf is generally a condition found in sheep and goats although it can be transmitted to humans. It is caused by the parapox virus.

In animals

- 'scabby' lesions around the mouth and nose

In humans

- generally affects the hands and arms
- initially small, raised, red-blue papules
- later may increase in size to 2-3 cm and become flat-topped and

haemorrhagic

Rate question:

Question 11 of 81



Please look at the multiple red lesions in the image below:



Image used on license from [DermNet NZ](#)



Which one of the following statements regarding these lesions is correct?

- A. They blanch on pressure
- B. Biopsy is required to exclude malignancy
- ✓ C. They affect men and women equally
- D. They are more common in patients who take statins
- ✗ E. Patients with multiple skin lesions often have iron deficiency anaemia

Question stats

A	15.7%
B	3.9%
C	54.9%
D	14.1%
E	11.4%

54.9% of users answered this question correctly

Session score = 36.4%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Cherry haemangioma

Cherry haemangiomas (Campbell de Morgan spots) are benign skin lesions which contain an abnormal proliferation of capillaries. They are more common with advancing age and affect men and women equally.

Features

- erythematous, papular lesions
- typically 1-3 mm in size
- non-blanching
- not found on the mucous membranes

As they are benign no treatment is usually required.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 12 of 81

Please look at the skin lesion on the side of the nose:



Image used on license from [DermNet NZ](#)

Which one of the following statements is correct about this type of lesion?

- A. They are also known as red moles
- B. They are more common in the lower part of the torso
- C. Alcoholic liver disease is the most common cause
- D. They are non-blanching
- E. **Around 10-15% of healthy people will have one or more of these lesions**


Question stats

A	5.7%
B	3.2%
C	17.3%
D	8.9%
E	65%

65% of users answered this question correctly

Session score = 41.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Spider naevi

Spider naevi (also called spider angiomas) describe a central red papule with surrounding capillaries. The lesions blanch upon pressure. Spider naevi are almost always found on the upper part of the body.

Around 10-15% of people will have one or more spider naevi and they are more common in childhood. Other associations

- liver disease
- pregnancy
- combined oral contraceptive pill

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 13 of 81



A 47-year-old woman complains of an itchy neck and scalp:



Image used on license from [DermNet NZ](#)

This skin condition is thought to occur as a result of a reaction to:



- A. *Trichophyton rubrum*
- B. *Trichophyton schoenleinii*
- C. *Microsporum audouinii*
- D. *Candida albicans*
- E. *Malassezia furfur*



Seborrhoeic dermatitis in adults

Seborrhoeic dermatitis in adults is a chronic dermatitis thought to be caused by an inflammatory reaction related to a proliferation of a normal skin inhabitant, a fungus called *Malassezia furfur* (formerly known as *Pityrosporum ovale*). It is common, affecting around 2% of the general population

Features

- eczematous lesions on the sebum-rich areas: scalp (may cause dandruff), periorbital, auricular and nasolabial folds
- otitis externa and blepharitis may develop

Associated conditions include

Question stats

A	<div style="width: 29.2%;"></div>	29.2%
B	<div style="width: 5.2%;"></div>	5.2%
C	<div style="width: 4.5%;"></div>	4.5%
D	<div style="width: 1.2%;"></div>	1.2%
E	<div style="width: 60%;"></div>	60%

60% of users answered this question correctly

Session score = 38.5%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Overview and pictures of seborrhoeic dermatitis

[Clinical Knowledge Summaries](#)

Seborrhoeic dermatitis guidelines

- HIV
- Parkinson's disease

Scalp disease management

- over the counter preparations containing zinc pyrithione ('Head & Shoulders') and tar ('Neutrogena T/Gel') are first-line
- the preferred second-line agent is ketoconazole
- selenium sulphide and topical corticosteroid may also be useful

Face and body management

- topical antifungals: e.g. Ketoconazole
- topical steroids: best used for short periods
- difficult to treat - recurrences are common

Rate question:

Question 14 of 81


Please look at the image below:



Image used on license from [DermNet NZ](#)


Question stats

A	<div style="width: 14.6%;"></div>	14.6%
B	<div style="width: 35.6%;"></div>	35.6%
C	<div style="width: 2.6%;"></div>	2.6%
D	<div style="width: 22.3%;"></div>	22.3%
E	<div style="width: 24.9%; background-color: green;"></div>	24.9%

24.9% of users answered this question correctly

Session score = 35.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Which one of the following statements regarding this condition is true?



- A. They represent ocular tuberous xanthoma
- B. **They are most commonly associated with hypertriglyceridaemia**
- C. Complications include malignant change in 0.2-0.5% of patients over 20 years
- D. All patients should be offered a statin
- E. **Treatment options include laser therapy**



This patient has xanthelasma around the left eye. Not all patients with xanthelasma have hypercholesterolaemia and hence not all require statins.

Hyperlipidaemia: xanthomata

Characteristic xanthomata seen in hyperlipidaemia:

Palmar xanthoma

- remnant hyperlipidaemia
- may less commonly be seen in familial hypercholesterolaemia

Eruptive xanthoma are due to high triglyceride levels and present as multiple red/yellow vesicles on the extensor surfaces (e.g. elbows, knees)

Causes of eruptive xanthoma

- familial hypertriglyceridaemia
- lipoprotein lipase deficiency

Tendon xanthoma, tuberous xanthoma, xanthelasma

- familial hypercholesterolaemia
- remnant hyperlipidaemia

Xanthelasma are also seen without lipid abnormalities

Management of xanthelasma, options include:

- surgical excision
- topical trichloroacetic acid
- laser therapy
- electrodesiccation

Rate question:

Question 16 of 231



A 19-year-old man comes for review after burning himself with an iron. On examination he has a 4 by 3 cm area of pale pink skin the left forearm. In the middle of the area there are two small, fluid filled blisters. What is the most accurate description for this type of injury?



- A. Partial thickness (deep dermal) burn
- B. Partial thickness (superficial dermal) burn
- C. Superficial epidermal burn
- D. Major scald
- E. Minor scald

Question stats

A	<div></div>	13.4%
B	<div></div>	60.1%
C	<div></div>	20.5%
D	<div></div>	2.4%
E	<div></div>	3.6%

60.1% of users answered this question correctly

Session score = 43.8%

Burns

The following is based on guidance issued by Clinical Knowledge Summaries (please see the link for more details).

Immediate first aid

- airway, breathing, circulation
- burns caused by heat: remove the person from the source. Within 20 minutes of the injury irrigate the burn with cool (not iced) water for between 10 and 30 minutes. Cover the burn using cling film, layered, rather than wrapped around a limb
- electrical burns: switch off power supply, remove the person from the source
- chemical burns: brush any powder off then irrigate with water. Attempts to neutralise the chemical are not recommended

Assessing the extent of the burn

- Wallace's Rule of Nines: head + neck = 9%, each arm = 9%, each anterior part of leg = 9%, each posterior part of leg = 9%, anterior chest = 9%, posterior chest = 9%, anterior abdomen = 9%, posterior abdomen = 9%
- Lund and Browder chart: the most accurate method
- the palmar surface is roughly equivalent to 1% of total body surface area (TBSA). Not accurate for burns > 15% TBSA

Assessing the depth of the burn

Modern terminology	Former terminology	Appearance
Superficial epidermal	First degree	Red and painful

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Burns and scalds

Partial thickness (superficial dermal)	Second degree	Pale pink, painful, blistered
Partial thickness (deep dermal)	Second degree	Typically white but may have patches of non-blanching erythema. Reduced sensation
Full thickness	Third degree	White/brown/black in colour, no blisters, no pain

Referral to secondary care

- all deep dermal and full-thickness burns.
- superficial dermal burns of more than 10% TBSA in adults, or more than 5% TBSA in children
- superficial dermal burns involving the face, hands, feet, perineum, genitalia, or any flexure, or circumferential burns of the limbs, torso, or neck
- any inhalation injury
- any electrical or chemical burn injury
- suspicion of non-accidental injury

Management of burns

- initial first aid as above
- review referral criteria to ensure can be managed in primary care
- superficial epidermal: symptomatic relief - analgesia, emollients etc
- superficial dermal: cleanse wound, leave blister intact, non-adherent dressing, avoid topical creams, review in 24 hours

Rate question:

Question 15 of 81



A 36-year-old female with a history of ulcerative colitis is diagnosed as having pyoderma gangrenosum. She presented 4 days ago with a 3 cm lesion on her right shin which rapidly ulcerated and is now painful:



Image used on license from [DermNet NZ](#)

What is the most appropriate management?

- A. Topical hydrocortisone
- ✓ B. Oral prednisolone
- C. Surgical debridement
- ✗ D. Topical tacrolimus
- E. Intravenous pulsed methylprednisolone

Topical therapy does have a role in pyoderma gangrenosum and it may seem intuitive to try this first before moving on to systemic treatment. However, pyoderma gangrenosum has the potential to evolve rapidly and for this reason oral prednisolone is usually given as initial treatment. For a review see BMJ 2006;333:181-184

Pyoderma gangrenosum

Features

- typically on the lower limbs
- initially small red papule
- later deep, red, necrotic ulcers with a violaceous border

Question stats

A	9.5%
B	62.5%
C	12.6%
D	5.5%
E	10%

62.5% of users answered this question correctly

Session score = 33.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of pyoderma gangrenosum

[DermNet NZ](#)

Stoma skin problems

may be accompanied systemic symptoms e.g. Fever, myalgia

Causes*

- idiopathic in 50%
- inflammatory bowel disease: ulcerative colitis, Crohn's
- rheumatoid arthritis, SLE
- myeloproliferative disorders
- lymphoma, myeloid leukaemias
- monoclonal gammopathy (IgA)
- primary biliary cirrhosis

Management

- the potential for rapid progression is high in most patients and most doctors advocate oral steroids as first-line treatment
- other immunosuppressive therapy, for example ciclosporin and infliximab, have a role in difficult cases

*note whilst pyoderma gangrenosum can occur in diabetes mellitus it is rare and is generally not included in a differential of potential causes

Rate question:

Question 16 of 81



An elderly man develops a generalised pruritic rash:



Image used on license from [DermNet NZ](#) and with the kind permission of Prof Raimo Suhonen

Which one of the following is the mainstay of treatment?

- A. Gluten free diet
- B. Phototherapy
-  C. Oral corticosteroids
-  D. Long-term oral antibiotics
- E. Potent topical corticosteroids

Question stats

A	3.9%
B	0.7%
C	90.4%
D	1.2%
E	3.8%

90.4% of users answered this question correctly

Session score = 31.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Bullous pemphigoid

[British Association of Dermatologists](#)

Bullous pemphigoid guidelines

Bullous pemphigoid

Bullous pemphigoid is an autoimmune condition causing sub-epidermal blistering of the skin. This is secondary to the development of antibodies against hemidesmosomal proteins BP180 and BP230

Bullous pemphigoid is more common in elderly patients. Features include

- itchy, tense blisters typically around flexures
- the blisters usually heal without scarring
- mouth is usually spared*

Skin biopsy

- immunofluorescence shows IgG and C3 at the dermoepidermal junction

Management

- referral to dermatologist for biopsy and confirmation of diagnosis
- oral corticosteroids are the mainstay of treatment
- topical corticosteroids, immunosuppressants and antibiotics are also used

*in reality around 10-50% of patients have a degree of mucosal involvement. It would however be unusual for an exam question to mention mucosal involvement as it is seen as a classic differentiating feature between pemphigoid and pemphigus.

Rate question:

Question 17 of 81



A 25-year-old male presents with extensive patches of altered pigmentation on his front, back, face and thighs. There is mild pruritus. A diagnosis of extensive pityriasis versicolor is made. What is the most appropriate management?

- A. Oral metronidazole
- B. Topical terbinafine
- ✓ C. Oral itraconazole
- D. Topical selenium sulphide
- ✗ E. Oral terbinafine

Given the extensive nature of the lesions systemic therapy is indicated in this case

Question stats

A	2.1%
B	11.1%
C	36.9%
D	31.7%
E	18.1%

36.9% of users answered this question correctly

Session score = 29.4%

Pityriasis versicolor

Pityriasis versicolor, also called tinea versicolor, is a superficial cutaneous fungal infection caused by *Malassezia furfur* (formerly termed *Pityrosporum ovale*)

Features

- most commonly affects trunk
- patches may be hypopigmented, pink or brown (hence versicolor)
- scale is common
- mild pruritus

Predisposing factors

- occurs in healthy individuals
- immunosuppression
- malnutrition
- Cushing's

Management

- topical antifungal e.g. terbinafine or selenium sulphide
- if extensive disease or failure to respond to topical treatment then consider oral itraconazole

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of pityriasis versicolor 1

[DermNet NZ](#)

Picture of pityriasis versicolor 2

[DermNet NZ](#)

Hypopigmentation post pityriasis versicolor

Question 18 of 81



An elderly man develops a blistering skin rash:



Image used on license from [DermNet NZ](#)

Which one of the following statements regarding the likely diagnosis is correct?

- ☒ A. It is associated with coeliac disease
- ☐ B. Eye involvement is the most common complication
- ☐ C. Topical corticosteroids are the mainstay of treatment
- ☐ D. It is less common than pemphigus vulgaris
- ☒ E. The blisters usually heal without scarring

Bullous pemphigoid

Bullous pemphigoid is an autoimmune condition causing sub-epidermal blistering of the skin. This is secondary to the development of antibodies against hemidesmosomal proteins BP180 and BP230

Bullous pemphigoid is more common in elderly patients. Features include

- itchy, tense blisters typically around flexures
- the blisters usually heal without scarring
- mouth is usually spared*

Skin biopsy

Question stats

A	9.1%
B	3%
C	11.7%
D	13.3%
E	62.9%

62.9% of users answered this question correctly

Session score = 27.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Bullous pemphigoid

[British Association of Dermatologists](#)

Bullous pemphigoid guidelines

- immunofluorescence shows IgG and C3 at the dermoepidermal junction

Management

- referral to dermatologist for biopsy and confirmation of diagnosis
- oral corticosteroids are the mainstay of treatment
- topical corticosteroids, immunosuppressants and antibiotics are also used


*in reality around 10-50% of patients have a degree of mucosal involvement. It would however be unusual for an exam question to mention mucosal involvement as it is seen as a classic differentiating feature between pemphigoid and pemphigus.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 19 of 81


A 74-year-old lady with a history of hypothyroidism presents in January to her GP with a rash down the right side of her body. On examination an erythematous rash with patches of hyperpigmentation and telangiectasia is found. What is the likely diagnosis?

- A. Erythema marginatum
- B. Herpes zoster
- C. Pretibial myxoedema
-  D. Erythema ab igne
- E. Xanthomata

This is a classic presentation of erythema ab igne. Despite the name, pretibial myxoedema is associated with hyperthyroidism rather than hypothyroidism.

Hypothyroidism can make patients feel cold and hence more likely to sit next a heater / fire.






Erythema ab igne

Erythema ab igne is a skin disorder caused by over exposure to infrared radiation. Characteristic features include erythematous patches with hyperpigmentation and telangiectasia. A typical history would be an elderly women who always sits next to an open fire

If the cause is not treated then patients may go on to develop squamous cell skin cancer

Rate question:

Question stats

A		21%
B		2%
C		8.9%
D		67%
E		1.1%

67% of users answered this question correctly

Session score = 31.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema ab igne

Question 20 of 81



An 18-year-old female presents to her GP complaining of scalp hair loss. Which one of the following conditions is least likely to be responsible?

- ✓ A. Porphyria cutanea tarda
- ✗ B. Discoid lupus
- C. Tinea capitis
- D. Alopecia areata
- E. Telogen effluvium

Porphyria cutanea tarda is a recognised cause of hypertrichosis

Alopecia

Alopecia may be divided into scarring (destruction of hair follicle) and non-scarring (preservation of hair follicle)

Scarring alopecia

- trauma, burns
- radiotherapy
- lichen planus
- discoid lupus
- tinea capitis*

Non-scarring alopecia

- male-pattern baldness
- drugs: cytotoxic drugs, carbimazole, heparin, oral contraceptive pill, colchicine
- nutritional: iron and zinc deficiency
- autoimmune: alopecia areata
- telogen effluvium (hair loss following stressful period e.g. surgery)
- trichotillomania

*scarring would develop in untreated tinea capitis if a kerion develops

Rate question:

Question stats

A	<div></div>	72.7%
B	<div></div>	6%
C	<div></div>	2.9%
D	<div></div>	3%
E	<div></div>	15.4%

72.7% of users answered this question correctly

Session score = 30%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 21 of 81



A 55-year-old female is referred to dermatology by her GP due to a lesions over both shins. On examination symmetrical erythematous lesions are found with an orange peel texture. What is the likely diagnosis?



- A. Pretibial myxoedema
- B. Pyoderma gangrenosum
- C. Necrobiosis lipoidica diabetorum
- D. Erythema nodosum
- E. Syphilis



Question stats

A	<div style="width: 77.4%;"></div>	77.4%
B	<div style="width: 1.2%;"></div>	1.2%
C	<div style="width: 17.2%;"></div>	17.2%
D	<div style="width: 3.9%;"></div>	3.9%
E	<div style="width: 0.2%;"></div>	0.2%

77.4% of users answered this question correctly

Session score = 28.6%

Shin lesions

The differential diagnosis of shin lesions includes the following conditions:

- erythema nodosum
- pretibial myxoedema
- pyoderma gangrenosum
- necrobiosis lipoidica diabetorum

Below are the characteristic features:

Erythema nodosum

- symmetrical, erythematous, tender, nodules which heal without scarring
- most common causes are streptococcal infections, sarcoidosis, inflammatory bowel disease and drugs (penicillins, sulphonamides, oral contraceptive pill)

Pretibial myxoedema

- symmetrical, erythematous lesions seen in Graves' disease
- shiny, orange peel skin

Pyoderma gangrenosum

- initially small red papule
- later deep, red, necrotic ulcers with a violaceous border
- idiopathic in 50%, may also be seen in inflammatory bowel disease, connective tissue disorders and myeloproliferative disorders

Necrobiosis lipoidica diabetorum

- shiny, painless areas of yellow/red skin typically on the shin of diabetics

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of erythema nodosum

[DermIS.net](#)

Picture of pretibial myxoedema

[DermNet NZ](#)

Picture of pyoderma gangrenosum

[DermNet NZ](#)

Picture of necrobiosis lipoidica

- often associated with telangiectasia

Rate question:

Question 22 of 81



You refer a 60-year-old man to secondary care due to the persistent white patches on the inside of his mouth. He has a 40-pack-year history of smoking and has had the lesions for around two years.



Question stats

A	2.4%
B	13.4%
C	4.7%
D	64.9%
E	14.5%

64.9% of users answered this question correctly

Session score = 27.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Biopsies are taken which exclude lichen planus and squamous cell carcinoma. Which one of the following statements regarding the likely diagnosis is correct?

- A. All patients should be prescribed multivitamin tablets
- ☒ B. It is more common in diabetics
- C. Topical steroids are the first-line treatment
- ☒ D. It is a diagnosis of exclusion
- E. Malignant transformation occurs in less than 1 in 10,000 patients

External links

[DermNet NZ](#)

Oral leukoplakia

Leukoplakia

Leukoplakia is a premalignant condition which presents as white, hard spots on the mucous membranes of the mouth. It is more common in smokers.

Leukoplakia is said to be a diagnosis of exclusion. Candidiasis and lichen planus should be considered, especially if the lesions can be 'rubbed off'

Biopsies are usually performed to exclude alternative diagnoses such as squamous cell carcinoma and regular follow-up is required to exclude malignant transformation to squamous cell carcinoma, which occurs in around 1% of patients.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 23 of 81


A 30-year-old man who is an immigrant from Albania presents to surgery with a translator. He has been unwell for a number of months and describes losing 8 kgs in weight and having chronic diarrhoea. On examination of his skin the following is seen:



Inside his mouth similar lesions can be seen on his hard palate and there is some bleeding around his gums. What is the most appropriate action?

- A. Give IM benzylpenicillin + phone 999
- B. Order a chest x-ray
- ☒ C. Order a HIV test
- D. Start vitamin C supplements
- E. Order hepatitis C test + cryoglobulin screen

Question stats

A	5.4%
B	7.8%
C	74.4%
D	9%
E	3.5%

74.4% of users answered this question correctly

Session score = 30.4%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

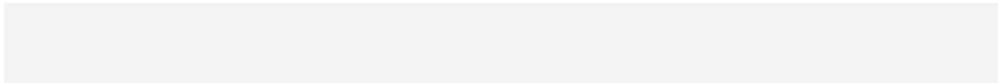
[DermIS.net](#)

Picture of Kaposi's sarcoma

HIV: Kaposi's sarcoma
Kaposi's sarcoma

- caused by HHV-8 (human herpes virus 8)
- presents as purple papules or plaques on the skin or mucosa (e.g. gastrointestinal and respiratory tract)
- skin lesions may later ulcerate
- respiratory involvement may cause massive haemoptysis and pleural effusion
- radiotherapy + resection

Rate question:



All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 24 of 81


This 17-year-old man has a history of asthma and eczema but is normally fit and well. Yesterday he developed a rash on face with extends down to his torso. He feels generally unwell with flu-like symptoms.



Image used on license from [DermNet NZ](#)



What is the most likely diagnosis?

- A. Erysipelas
- B. Stevens-Johnson syndrome
- C. Impetigo
- ✓ D. Eczema herpeticum
- E. Allergic contact dermatitis

Question stats

A	6.1%
B	4.7%
C	3.7%
D	84.5%
E	0.9%

84.5% of users answered this question correctly

Session score = 33.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Eczema herpeticum

Eczema herpeticum describes a severe primary infection of the skin by herpes simplex virus 1 or 2. It is more commonly seen in children with atopic eczema. As it is potentially life threatening children should be admitted for IV aciclovir

Rate question:

Question 17 of 231



A 23-year-old man presents as he is concerned about recent hair loss. Examination reveals the following:



What is the most likely diagnosis?



- A. Telogen effluvium
- B. Alopecia areata
- C. Tinea capitis
- D. Male-pattern baldness
- E. Discoid lupus erythematosus

Alopecia areata

Alopecia areata is a presumed autoimmune condition causing localised, well demarcated patches of hair loss. At the edge of the hair loss, there may be small, broken 'exclamation mark' hairs

Hair will regrow in 50% of patients by 1 year, and in 80-90% eventually. Careful explanation is therefore sufficient in many patients. Other treatment options include:

- topical or intralesional corticosteroids
- topical minoxidil
- phototherapy
- dithranol

Question stats

A	1.5%
B	85.2%
C	12.2%
D	0.3%
E	0.8%

85.2% of users answered this question correctly

Session score = 47.1%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

Alopecia areata guidelines

[Clinical Knowledge Summaries](#)

Alopecia areata guidelines

- contact immunotherapy
- wigs

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 25 of 81



A 45-year-old man who presented with itchy lesions on his hands is diagnosed with scabies. It is decided to treat him with permethrin 5%. You have explained the need to treat all members of the household and hot wash all bedding and clothes. What advice should be given about applying the cream?

- A. From the neck down + leave for 12 hours
- B. All skin including scalp + leave for 12 hours + retreat in 2 days
- ✓ C. All skin including scalp + leave for 12 hours + retreat in 7 days
- D. From the neck down + leave for 4 hours
- ✗ E. From the neck down + leave for 12 hours + retreat in 7 days

Scabies - permethrin treatment: all skin including scalp + leave for 12 hours + retreat in 7 days

The BNF advises to apply the insecticide to all areas, including the face and scalp, contrary to the manufacturer's recommendation (and common practice).

Scabies

Scabies is caused by the mite *Sarcoptes scabiei* and is spread by prolonged skin contact. It typically affects children and young adults.

The scabies mite burrows into the skin, laying its eggs in the stratum corneum. The intense pruritus associated with scabies is due to a delayed type IV hypersensitivity reaction to mites/eggs which occurs about 30 days after the initial infection.

Features

- widespread pruritus
- linear burrows on the side of fingers, interdigital webs and flexor aspects of the wrist
- in infants the face and scalp may also be affected
- secondary features are seen due to scratching: excoriation, infection

Management

- permethrin 5% is first-line
- malathion 0.5% is second-line
- give appropriate guidance on use (see below)
- pruritus persists for up to 4-6 weeks post eradication

Patient guidance on treatment (from Clinical Knowledge Summaries)

Question stats

A	6.5%
B	3.7%
C	64.6%
D	1.2%
E	23.9%

64.6% of users answered this question correctly

Session score = 32%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[National Prescribing Centre](#)
2008 Scabies guidelines

[Postgraduate Medical Journal](#)
Review of scabies

[Postgraduate Medical Journal](#)
Scabies management

- avoid close physical contact with others until treatment is complete
- all household and close physical contacts should be treated at the same time, even if asymptomatic
- launder, iron or tumble dry clothing, bedding, towels, etc., on the first day of treatment to kill off mites.

The BNF advises to apply the insecticide to all areas, including the face and scalp, contrary to the manufacturer's recommendation. Patients should be given the following instructions:

- apply the insecticide cream or liquid to cool, dry skin
- pay close attention to areas between fingers and toes, under nails, armpit area, creases of the skin such as at the wrist and elbow
- allow to dry and leave on the skin for 8–12 hours for permethrin, or for 24 hours for malathion, before washing off
- reapply if insecticide is removed during the treatment period, e.g. If wash hands, change nappy, etc
- repeat treatment 7 days later

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 26 of 81



A 34-year-old man presents with a three week history of an intensely itchy rash just below his knees. On examination he has a symmetrical vesicular rash as shown below and also some early lesions on the back of his arms.



Image used on license from [DermNet NZ](#) and with the kind permission of Prof Raimo Suhonen

Which one of the following antibodies is most likely to be positive?

- A. Anti-mitochondrial antibody
- ✓ B. Anti-gliadin antibody
- C. Anti-nuclear antibody
- D. Anti-neutrophil cytoplasmic antibody
- ✗ E. Anti-Jo-1 antibody

Question stats

A	10.9%
B	56.7%
C	16.9%
D	8.7%
E	6.8%

56.7% of users answered this question correctly

Session score = 30.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Dermatitis herpetiformis

Dermatitis herpetiformis

Dermatitis herpetiformis is an autoimmune blistering skin disorder associated with coeliac disease. It is caused by deposition of IgA in the dermis.

Features

- itchy, vesicular skin lesions on the extensor surfaces (e.g. elbows, knees buttocks)

Diagnosis

- skin biopsy: direct immunofluorescence shows deposition of IgA in a granular pattern in the upper dermis

Management

- gluten-free diet
- dapsone



Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 27 of 81



A 17-year-old male is reviewed six weeks after starting an oral antibiotic for acne vulgaris. He stopped taking the drug two weeks ago due to perceived alteration in his skin colour, and denies been exposed to strong sunlight for the past six months. On examination he has generalised increased skin pigmentation, including around the buttocks. Which one of the following antibiotics was he likely to be taking?

- A. Doxycycline
-  B. **Oxytetracycline**
- C. Tetracycline
- D. Erythromycin
-  E. **Minocycline**

Minocycline can cause irreversible skin pigmentation and is now considered a second line drug in acne. Photosensitivity secondary to tetracycline/doxycycline is less likely given the generalised distribution of the pigmentation and the failure to improve following drug withdrawal

Acne vulgaris: management

Acne vulgaris is a common skin disorder which usually occurs in adolescence. It typically affects the face, neck and upper trunk and is characterised by the obstruction of the pilosebaceous follicles with keratin plugs which results in comedones, inflammation and pustules.






Acne may be classified into mild, moderate or severe:

- mild: open and closed comedones with or without sparse inflammatory lesions
- moderate acne: widespread non-inflammatory lesions and numerous papules and pustules
- severe acne: extensive inflammatory lesions, which may include nodules, pitting, and scarring

A simple step-up management scheme often used in the treatment of acne is as follows:

- single topical therapy (topical retinoids, benzyl peroxide)
- topical combination therapy (topical antibiotic, benzoyl peroxide, topical retinoid)
- oral antibiotics: e.g. Oxytetracycline, doxycycline. Improvement may not be seen for 3-4 months. Minocycline is now considered less appropriate due to the possibility of irreversible pigmentation. Gram negative folliculitis may occur as a complication of long-term antibiotic use - high-dose oral trimethoprim is effective if this occurs
- oral isotretinoin: only under specialist supervision

Question stats

A		15.7%
B		7.7%
C		6.7%
D		1.3%
E		68.6%

68.6% of users answered this question correctly

Session score = 29.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Acne vulgaris guidelines

There is no role for dietary modification in patients with acne

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 28 of 81



Which one of the following treatments is least useful in the management of scalp psoriasis

- A. Steroid lotion
- ✓ B. Hydroxyurea lotion
- C. Tar shampoos
- ✗ D. Coconut oil compound shampoos
- E. Calcipotriol lotion

Question stats

A	<div></div>	16.4%
B	<div></div>	58.1%
C	<div></div>	3.4%
D	<div></div>	18.8%
E	<div></div>	3.3%

58.1% of users answered this question correctly

Session score = 28.6%

Psoriasis: management

SIGN released guidelines in 2010 on the management of psoriasis and psoriatic arthropathy. Please see the link for more details.

Chronic plaque psoriasis

- regular emollients may help to reduce scale loss and reduce pruritus
- for acute control SIGN recommend: 'Short term intermittent use of a potent topical corticosteroid or a combined potent corticosteroid plus calcipotriol

ointment is recommended to gain rapid improvement in plaque psoriasis.'

- 'For long term topical treatment of plaque psoriasis a vitamin D analogue (e.g. Calcipotriol) is recommended.'
- 'If a vitamin D analogue is ineffective or not tolerated then consider coal tar (solution, cream or lotion), tazarotene gel, or short contact dithranol (30 minute exposure in patients with a small number of relatively large plaques of psoriasis).

Steroids in psoriasis

- topical steroids are commonly used in flexural psoriasis and there is also a role for mild steroids in facial psoriasis. If steroids are ineffective for these conditions vitamin D analogues or tacrolimus ointment should be used second line
- SIGN caution against the long term use of potent or very potent topical steroids due to the risk of side-effects

Scalp psoriasis

- for short term control SIGN recommend either the use of potent topical corticosteroids or a combination of a potent corticosteroid and a vitamin D

analogue

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[SIGN](#)

2010 Psoriasis guidelines

- 'For patients with thick scaling of the scalp, initial treatment with overnight application of salicylic acid, tar preparations, or oil preparations (eg olive oil, coconut oil) to remove thick scale is recommended.

Secondary care management

Phototherapy

- narrow band ultraviolet B light (311-313nm) is now the treatment of choice
- photochemotherapy is also used - psoralen + ultraviolet A light (PUVA)
- adverse effects: skin ageing, squamous cell cancer (not melanoma)

Systemic therapy

- methotrexate: useful if associated joint disease
- ciclosporin
- systemic retinoids
- biological agents: infliximab, etanercept and adalimumab
- ustekinumab (IL-12 and IL-23 blocker) is showing promise in early trials

Mechanism of action of commonly used drugs:

- coal tar: probably inhibit DNA synthesis
- calcipotriol: vitamin D analogue which reduces epidermal proliferation and restores a normal horny layer
- dithranol: inhibits DNA synthesis, wash off after 30 mins, SE: burning, staining

Rate question:

Question 29 of 81



A middle aged man develops a non-pruritic rash after starting allopurinol therapy for gout. The rash develop within 24 hours and started on the back of his hands.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?



- A. Allopurinol-associated dermatitis
- B. **Plaque-type tophi**
- C. **Erythema multiforme**
- D. Erythema marginatum
- E. Eosinophilic folliculitis

Question stats

A	4.1%
B	2.3%
C	84.7%
D	4.7%
E	4.3%

84.7% of users answered this question correctly

Session score = 27.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema multiforme

Erythema multiforme

Features

- target lesions
- initially seen on the back of the hands / feet before spreading to the torso
- upper limbs are more commonly affected than the lower limbs
- pruritus is occasionally seen and is usually mild

If symptoms are severe and involve blistering and mucosal involvement the term Stevens-Johnson syndrome is used.

Causes

- viruses: herpes simplex virus (the most common cause), Orf*
- idiopathic
- bacteria: *Mycoplasma*, *Streptococcus*
- drugs: penicillin, sulphonamides, carbamazepine, allopurinol, NSAIDs, oral contraceptive pill, nevirapine
- connective tissue disease e.g. Systemic lupus erythematosus
- sarcoidosis
- malignancy

*Orf is a skin disease of sheep and goats caused by a parapox virus



Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 30 of 81



A 65-year-old woman presents with bullae on her forearms following a recent holiday in Spain. She also notes that the skin on her hands is extremely fragile and tears easily. In the past the patient has been referred to dermatology due to troublesome hypertrichosis. What is the most likely diagnosis?

- A. Pellagra
- B. Pemphigus vulgaris
-  C. **Epidermolysis bullosa**
- D. Bullous pemphigoid
-  E. **Porphyria cutanea tarda**

Porphyria cutanea tarda

- blistering photosensitive rash
- hypertrichosis
- hyperpigmentation

Porphyria cutanea tarda

Porphyria cutanea tarda is the most common hepatic porphyria. It is due to an inherited defect in uroporphyrinogen decarboxylase or caused by hepatocyte damage e.g. alcohol, oestrogens

Features

- classically presents with photosensitive rash with blistering and skin fragility on the face and dorsal aspect of hands (most common feature)
- hypertrichosis
- hyperpigmentation

Investigations






- urine: elevated uroporphyrinogen and pink fluorescence of urine under Wood's lamp

Management

- chloroquine
- venesection

Rate question:

Question stats

A		5.2%
B		9.5%
C		20%
D		14.7%
E		50.7%

50.7% of users answered this question correctly

Session score = 26.7%

RCGP curriculum

15.10 - Skin Problems

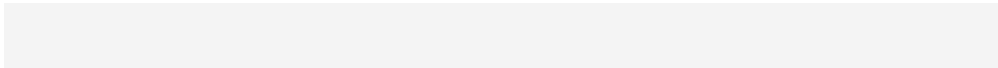
[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of porphyria cutanea tarda



All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 31 of 81



A 67-year-old man presents with a rough, scaly lesion on his nose:



Image used on license from [DermNet NZ](#) and with the kind permission of Prof Raimo Suhonen

Which one of the following is not a treatment option for the management of this condition?

- ☒ A. Topical diclofenac
- ☐ B. Topical betnovate
- ☐ C. Topical fluorouracil
- ☐ D. Topical imiquimod
- ☐ E. Cryotherapy

Question stats

A	14.8%
B	55.3%
C	9.2%
D	9.7%
E	11.1%

55.3% of users answered this question correctly

Session score = 25.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

2007 Actinic keratoses guidelines

[DermNet NZ](#)

Actinic keratoses

Actinic keratoses

Actinic, or solar, keratoses (AK) is a common premalignant skin lesion that develops as a consequence of chronic sun exposure

Features

- small, crusty or scaly, lesions
- may be pink, red, brown or the same colour as the skin
- typically on sun-exposed areas e.g. temples of head
- multiple lesions may be present

Management options include

- prevention of further risk: e.g. sun avoidance, sun cream
- fluorouracil cream: typically a 2 to 3 week course. The skin will become red and inflamed - sometimes topical hydrocortisone is given following fluorouracil to help settle the inflammation
- topical diclofenac: may be used for mild AKs. Moderate efficacy but much fewer side-effects
- topical imiquimod: trials have shown good efficacy
- cryotherapy
- curettage and cautery

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 32 of 81



A 4-year-old boy who is being investigated for development delay is noted to have a number of skin lesions similar to the one below:



Image used on license from [DermNet NZ](#)



What is the most likely diagnosis?

- A. Vitiligo
- B. Down's syndrome
- C. Tuberous sclerosis
- D. Edward's syndrome
- E. Neurofibromatosis



Question stats

A	21.2%
B	1%
C	58%
D	2.3%
E	17.5%

58% of users answered this question correctly

Session score = 25%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Tuberous sclerosis

Tuberous sclerosis (TS) is a genetic condition of autosomal dominant inheritance. Like neurofibromatosis, the majority of features seen in TS are neuro-cutaneous

Cutaneous features

- depigmented 'ash-leaf' spots which fluoresce under UV light
- roughened patches of skin over lumbar spine (Shagreen patches)
- adenoma sebaceum: butterfly distribution over nose
- fibromata beneath nails (subungual fibromata)
- café-au-lait spots* may be seen

Neurological features

- developmental delay
- epilepsy (infantile spasms or partial)
- intellectual impairment

Also

- retinal hamartomas: dense white areas on retina (phakomata)
- rhabdomyomas of the heart
- gliomatous changes can occur in the brain lesions
- polycystic kidneys, renal angiomyolipomata

*these of course are more commonly associated with neurofibromatosis. However a 1998 study of 106 children with TS found café-au-lait spots in 28% of patients

Rate question:

Question 33 of 81



The patient below has psoriasis:



Image used on license from [DermNet NZ](#)

Which treatment is he most likely to be using?

- A. Infliximab
- ✓ B. Dithranol
- C. Coal tar
- ✗ D. Calcipotriol
- E. PUVA

This image shows the typical brown staining that can result from dithranol treatment. The staining of the skin is temporary but patients should be warned it can permanently stain their clothes.

Psoriasis: management

SIGN released guidelines in 2010 on the management of psoriasis and psoriatic arthropathy. Please see the link for more details.

Chronic plaque psoriasis

- regular emollients may help to reduce scale loss and reduce pruritus
- for acute control SIGN recommend: 'Short term intermittent use of a potent topical corticosteroid or a combined potent corticosteroid plus calcipotriol

ointment is recommended to gain rapid improvement in plaque psoriasis.'

- 'For long term topical treatment of plaque psoriasis a vitamin D analogue

Question stats

A	11.1%
B	36%
C	13.8%
D	8.8%
E	30.3%

36% of users answered this question correctly

Session score = 24.2%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[SIGN](#)

2010 Psoriasis guidelines

(e.g. Calcipotriol) is recommended.'

- 'If a vitamin D analogue is ineffective or not tolerated then consider coal tar (solution, cream or lotion), tazarotene gel, or short contact dithranol (30 minute exposure in patients with a small number of relatively large plaques of psoriasis).

Steroids in psoriasis

- topical steroids are commonly used in flexural psoriasis and there is also a role for mild steroids in facial psoriasis. If steroids are ineffective for these conditions vitamin D analogues or tacrolimus ointment should be used second line
- SIGN caution against the long term use of potent or very potent topical steroids due to the risk of side-effects

Scalp psoriasis

- for short term control SIGN recommend either the use of potent topical corticosteroids or a combination of a potent corticosteroid and a vitamin D

analogue

- 'For patients with thick scaling of the scalp, initial treatment with overnight application of salicylic acid, tar preparations, or oil preparations (eg olive oil, coconut oil) to remove thick scale is recommended.

Secondary care management

Phototherapy

- narrow band ultraviolet B light (311-313nm) is now the treatment of choice
- photochemotherapy is also used - psoralen + ultraviolet A light (PUVA)
- adverse effects: skin ageing, squamous cell cancer (not melanoma)

Systemic therapy

- methotrexate: useful if associated joint disease
- ciclosporin
- systemic retinoids
- biological agents: infliximab, etanercept and adalimumab
- ustekinumab (IL-12 and IL-23 blocker) is showing promise in early trials

Mechanism of action of commonly used drugs:

- coal tar: probably inhibit DNA synthesis
- calcipotriol: vitamin D analogue which reduces epidermal proliferation and restores a normal horny layer
- dithranol: inhibits DNA synthesis, wash off after 30 mins, SE: burning, staining

Rate question:

Question 34 of 81


A 78-year-old woman asks you for cream to treat a lesion on her left cheek. It has been present for the past nine months and is asymptomatic.



What is the most likely diagnosis?

- A. Solar lentigo
- B. Dermatofibroma
- ✓ C. **Lentigo maligna**
- D. Bowen's disease
- ✗ E. **Seborrhoeic keratosis**

These lesions often present a diagnostic dilemma. The asymmetrical nature of the lesion would however point away from a diagnosis of solar lentigo. These patients should be referred to dermatology

Lentigo maligna

Lentigo maligna is a type of melanoma in-situ. It typically progresses slowly but may at some stage become invasive causing lentigo maligna melanoma.

Rate question:

Question stats

A	16.4%
B	0.9%
C	64.2%
D	10.8%
E	7.7%

64.2% of users answered this question correctly

Session score = 23.5%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 18 of 231


A 19-year-old student presents with a 1 cm golden, crusted lesion on the border of her left lower lip. What is the most suitable management?



- A. Oral co-amoxiclav
- B. Oral penicillin
- C. Oral flucloxacillin
- D. Oral flucloxacillin + penicillin
- E. Topical fusidic acid



Impetigo - topical fusidic acid --> oral flucloxacillin / topical retapamulin

As the lesion is small and localised topical fusidic acid is recommended

Impetigo: management

Limited, localised disease

- topical fusidic acid is first-line
- topical retapamulin is used second-line if fusidic acid has been ineffective or is not tolerated
- MRSA is not susceptible to either fusidic acid or retapamulin. Topical mupirocin (Bactroban) should therefore be used in this situation

Extensive disease

- oral flucloxacillin
- oral erythromycin if penicillin allergic

Rate question:

Question stats

A	1.3%
B	1.4%
C	14.7%
D	1.9%
E	80.7%

80.7% of users answered this question correctly

Session score = 44.4%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)
Impetigo guidelines

Question 35 of 81



Please look at this man's head:



Image used on license from [DermNet NZ](#)



These skin lesions have been present for the past year. What is the most likely diagnosis?

- A. Multiple basal cell carcinomas
- B. Squamous cell carcinoma
- C. **Actinic keratoses**
- D. Seborrhoeic dermatitis
- E. Seborrhoeic keratoses



Question stats

A	2.2%
B	1.4%
C	81.9%
D	4.5%
E	10%

81.9% of users answered this question correctly

Session score = 25.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

2007 Actinic keratoses guidelines

[DermNet NZ](#)

Actinic keratoses

Actinic keratoses

Actinic, or solar, keratoses (AK) is a common premalignant skin lesion that develops as a consequence of chronic sun exposure

Features

- small, crusty or scaly, lesions
- may be pink, red, brown or the same colour as the skin
- typically on sun-exposed areas e.g. temples of head
- multiple lesions may be present

Management options include

- prevention of further risk: e.g. sun avoidance, sun cream
- fluorouracil cream: typically a 2 to 3 week course. The skin will become red and inflamed - sometimes topical hydrocortisone is given following fluorouracil to help settle the inflammation
- topical diclofenac: may be used for mild AKs. Moderate efficacy but much fewer side-effects
- topical imiquimod: trials have shown good efficacy
- cryotherapy
- curettage and cautery

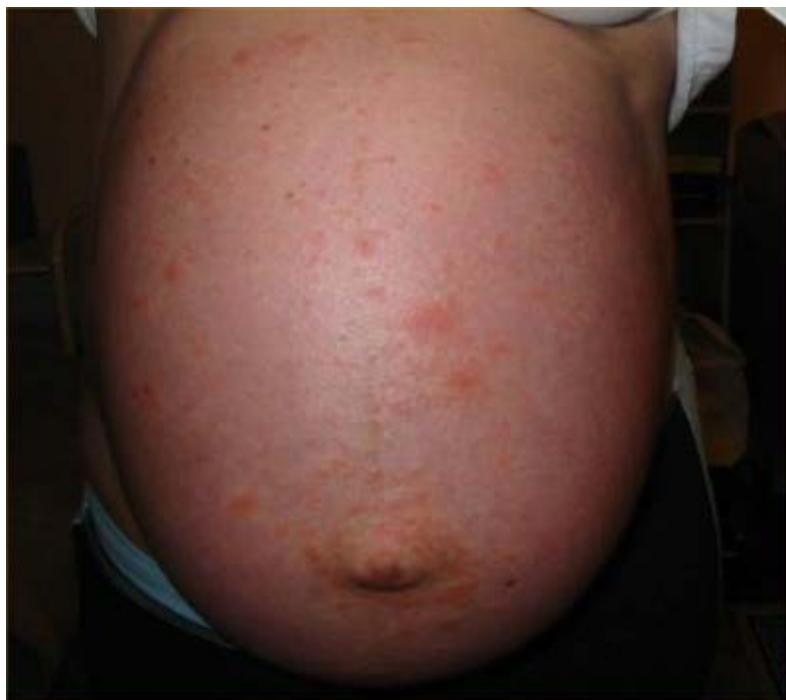
Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 36 of 81



A 24-year-old female in her third trimester of pregnancy mentions during a routine antenatal appointment that she has noticed an itchy rash around her umbilicus.



What is the most likely diagnosis?



- A. Polymorphic eruption of pregnancy
- B. Pompholyx
- C. Herpes gestationis
- D. Lichen planus
- E. Seborrhoeic dermatitis

Question stats

A	<div style="width: 83.1%;"></div>	83.1%
B	<div style="width: 3.9%;"></div>	3.9%
C	<div style="width: 10.6%;"></div>	10.6%
D	<div style="width: 0.8%;"></div>	0.8%
E	<div style="width: 1.6%;"></div>	1.6%

83.1% of users answered this question correctly

Session score = 27.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Polymorphic eruption of pregnancy

[DermNet NZ](#)

Pemphigoid gestationis

Skin disorders associated with pregnancy

Polymorphic eruption of pregnancy

- pruritic condition associated with last trimester
- lesions often first appear in abdominal striae
- management depends on severity: emollients, mild potency topical steroids and oral steroids may be used

Pemphigoid gestationis

- pruritic blistering lesions
- often develop in peri-umbilical region, later spreading to the trunk, back, buttocks and arms
- usually presents 2nd or 3rd trimester and is rarely seen in the first pregnancy
- oral corticosteroids are usually required

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 37 of 81

A 49-year-old woman complains of 'spots' on her cheeks. She has tried using her daughter's 'Clearasil' but this has had no effect.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Seborrhoeic dermatitis
- B. Systemic lupus erythematosus
- C. Perioral dermatitis
- D. Late-onset acne vulgaris
- ✓ E. **Acne rosacea**

Perioral dermatitis is a differential diagnosis but it does not commonly affect the cheeks.

Acne rosacea

Acne rosacea is a chronic skin disease of unknown aetiology

Features

- typically affects nose, cheeks and forehead
- flushing is often first symptom
- telangiectasia are common
- later develops into persistent erythema with papules and pustules
- rhinophyma
- ocular involvement: blepharitis

Question stats

A	2.5%
B	5.7%
C	1%
D	6.9%
E	83.8%

83.8% of users answered this question correctly

Session score = 29.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Rosacea guidelines

Management

- topical metronidazole may be used for mild symptoms (i.e. Limited number of papules and pustules, no plaques)
- more severe disease is treated with systemic antibiotics e.g. Oxytetracycline
- recommend daily application of a high-factor sunscreen
- camouflage creams may help conceal redness
- laser therapy may be appropriate for patients with prominent telangiectasia

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 38 to 40 of 81

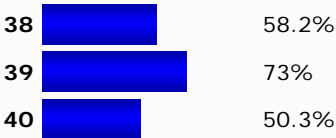


Theme: Skin disorders associated with malignancy

- A Oesophageal cancer
- B Lymphoma
- C Prostate cancer
- D Lung cancer
- E Head and neck cancers
- F Malignant melanoma
- G Gastric cancer
- H Colorectal cancer
- I Glucagonoma

Question stats

Average score for registered users:



Session score = 32.5%

For each one of the following rashes please select the malignancy that is most associated with it:

38. Tylosis



Oesophageal cancer

39. Acanthosis nigricans



Glucagonoma

The correct answer is Gastric cancer

40. Acquired ichthyosis



Lymphoma

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of acanthosis nigricans

[DermNet NZ](#)

Picture of Sweet's syndrome

[DermNet NZ](#)

Picture of dermatomyositis

[DermNet NZ](#)

Picture of erythema gyratum repens

[DermNet NZ](#)

Picture of pyoderma gangrenosum

Skin disorders associated with malignancy

Paraneoplastic syndromes associated with internal malignancies:

Skin disorder	Associated malignancies
Acanthosis nigricans	Gastric cancer

Acquired ichthyosis	Lymphoma
Acquired hypertrichosis lanuginosa	Gastrointestinal and lung cancer
Dermatomyositis	Ovarian and lung cancer
Erythema gyratum repens	Lung cancer
Erythroderma	Lymphoma
Migratory thrombophlebitis	Pancreatic cancer
Necrolytic migratory erythema	Glucagonoma
Pyoderma gangrenosum (bullous and non-bullous forms)	Myeloproliferative disorders
Sweet's syndrome	Haematological malignancy e.g. Myelodysplasia - tender, purple plaques
Tylosis	Oesophageal cancer

Rate question:

Question 41 of 81


A 72-year-old woman who is known to have type 2 diabetes mellitus and heart failure is reviewed. One week ago she was treated with oral flucloxacillin and penicillin V for a right lower limb cellulitis. Unfortunately there has been no response to treatment. What is the most appropriate next line antibiotic?

- A. Co-amoxiclav
- B. Erythromycin
- C. **Clindamycin**
- D. **Vancomycin**
- E. Gentamicin


Question stats

A		14.9%
B		16.9%
C		57.9%
D		8.7%
E		1.5%

57.9% of users answered this question correctly

Session score = 31.7%

Cellulitis: management

The BNF recommends flucloxacillin as first-line treatment for mild/moderate cellulitis. Erythromycin is recommend in patients allergic to penicillin. Treatment failure is now commonly treated with oral clindamycin.

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 1 of 40 ✗



A 37-year-old man complains of 'flaky' eyebrows:



Image used on license from [DermNet NZ](#)

Which underlying condition is this skin condition most associated with?

- A. Diabetes mellitus
- ✗ B. Alcohol excess
- C. Sarcoidosis
- D. Tuberculosis
- ✓ E. HIV

Question stats

A	<div style="width: 26.5%;"></div>	26.5%
B	<div style="width: 14.1%;"></div>	14.1%
C	<div style="width: 9.6%;"></div>	9.6%
D	<div style="width: 0.4%;"></div>	0.4%
E	<div style="width: 49.4%; background-color: green;"></div>	49.4%

49.4% of users answered this question correctly

Session score = 0%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Overview and pictures of seborrhoeic dermatitis

[Clinical Knowledge Summaries](#)

Seborrhoeic dermatitis guidelines

Seborrhoeic dermatitis in adults

Seborrhoeic dermatitis in adults is a chronic dermatitis thought to be caused by an inflammatory reaction related to a proliferation of a normal skin inhabitant, a fungus called *Malassezia furfur* (formerly known as *Pityrosporum ovale*). It is common, affecting around 2% of the general population

Features

- eczematous lesions on the sebum-rich areas: scalp (may cause dandruff), periorbital, auricular and nasolabial folds
- otitis externa and blepharitis may develop

Associated conditions include

- HIV
- Parkinson's disease

Scalp disease management

- over the counter preparations containing zinc pyrithione ('Head & Shoulders') and tar ('Neutrogena T/Gel') are first-line
- the preferred second-line agent is ketoconazole
- selenium sulphide and topical corticosteroid may also be useful

Face and body management

- topical antifungals: e.g. Ketoconazole
- topical steroids: best used for short periods
- difficult to treat - recurrences are common

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 2 of 40



Which one of the following causes of pneumonia is most associated with the development of Stevens-Johnson syndrome?



- A. Legionella
- B. **Mycoplasma**
- C. Coxiella
- D. *Staphylococcus*
- E. Klebsiella

Question stats

A	<div></div>	4.9%
B	<div></div>	76%
C	<div></div>	1.7%
D	<div></div>	14.7%
E	<div></div>	2.7%

76% of users answered this question correctly

Session score = 50%

Stevens-Johnson syndrome

Stevens-Johnson syndrome severe form of erythema multiforme associated with mucosal involvement and systemic symptoms

Features

- rash is typically maculopapular with target lesions being characteristic. May develop into vesicles or bullae
- mucosal involvement
- systemic symptoms: fever, arthralgia

Causes

- idiopathic
- bacteria: *Mycoplasma*, *Streptococcus*
- viruses: herpes simplex virus, Orf
- drugs: penicillin, sulphonamides, carbamazepine, allopurinol, NSAIDs, oral contraceptive pill
- connective tissue disease e.g. SLE
- sarcoidosis
- malignancy

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

Question 3 of 40



You notice an abnormality on the neck of a 40-year-old woman:



Image used on license from [DermNet NZ](#) and with the kind permission of Prof Raimo Suhonen



Which one of the following is most associated with this appearance?

- A. Lung cancer
- B. Acute pancreatitis
- C. Haemochromatosis
- ✓ D. Polycystic ovarian syndrome
- E. Digoxin use

This patient has acanthosis nigricans which is associated with a number of hyperinsulinaemia states such as polycystic ovarian syndrome.

Whilst acanthosis nigricans can be associated with any type of cancer by far the most common malignant cause is gastrointestinal adenocarcinoma.

Acanthosis nigricans

Describes symmetrical, brown, velvety plaques that are often found on the neck, axilla and groin

Causes

- gastrointestinal cancer
- insulin-resistant diabetes mellitus

Question stats

A	11.3%
B	2.9%
C	21.5%
D	60.8%
E	3.5%

60.8% of users answered this question correctly

Session score = 66.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Acanthosis nigricans

- obesity
- polycystic ovarian syndrome
- acromegaly
- Cushing's disease
- hypothyroidism
- familial
- Prader-Willi syndrome
- drugs: oral contraceptive pill, nicotinic acid

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 4 of 40



A 49-year-old man presents to his GP complaining of scalp hair loss. Examination reveals generalised scalp hair loss that does not follow the typical male-pattern distribution. Which one of the following medications is least likely to be responsible?

- A. Colchicine
- B. Cyclophosphamide
- ☒ C. Heparin
- D. Carbimazole
- ☒ E. Phenytoin

Question stats

A	<div></div>	18.1%
B	<div></div>	7.8%
C	<div></div>	22.9%
D	<div></div>	6.5%
E	<div></div>	44.7%

44.7% of users answered this question correctly

Session score = 50%

Phenytoin is a recognised cause of hirsutism, rather than alopecia

Alopecia

Alopecia may be divided into scarring (destruction of hair follicle) and non-scarring (preservation of hair follicle)

Scarring alopecia

- trauma, burns
- radiotherapy
- lichen planus
- discoid lupus
- tinea capitis*

Non-scarring alopecia

- male-pattern baldness
- drugs: cytotoxic drugs, carbimazole, heparin, oral contraceptive pill, colchicine
- nutritional: iron and zinc deficiency
- autoimmune: alopecia areata
- telogen effluvium (hair loss following stressful period e.g. surgery)
- trichotillomania

*scarring would develop in untreated tinea capitis if a kerion develops

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 5 of 40



You are teaching the parent of a 4-year-old child with eczema on the correct use of emollients. Which one of the following statements is correct?



- A. Emollients should be applied against the direction of hair growth
- B. Around 100g / week should be used
- C. The ratio of emollient to topical steroid should be about 50:1
- D. **If a topical steroid is used then emollients should be applied about 30 minutes after the steroid**
- E. Emollients should be rubbed in to the skin until they 'disappear'

The British Association of Dermatologists recommend waiting 30 minutes.

Eczema in children

Eczema occurs in around 15-20% of children and is becoming more common. It typically presents before 6 months but clears in around 50% of children by 5 years of age and in 75% of children by 10 years of age

Features

- in infants the face and trunk are often affected
- in younger children eczema often occurs on the extensor surfaces
- in older children a more typical distribution is seen, with flexor surfaces affected and the creases of the face and neck

Management

- avoid irritants
- simple emollients: large quantities should be prescribed (e.g. 250g / week), roughly in a ratio of with topical steroids of 10:1. If emollients are used in conjunction with a topical steroid they should be applied around 30 minutes after the steroid
- topical steroids
- in severe cases wet wraps and oral ciclosporin may be used

Rate question:

Question stats

A		2.5%
B		4.3%
C		6.7%
D		78%
E		8.6%

78% of users answered this question correctly

Session score = 60%

External links

[British Association of Dermatologists](#)

Atopic eczema guidelines

Question 19 of 231



A 43-year-old woman comes for review. A few months ago she developed redness around her nose and cheeks. This is worse after drinking alcohol. She is concerned as one of her work colleagues asked her if she had a drink problem despite her drinking 10 units per week.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Mitral stenosis
- B. Seborrhoeic dermatitis
- C. Alcohol-related skin changes
- ☒ D. Acne rosacea
- E. Systemic lupus erythematosus

This is a typical history of acne rosacea.

Acne rosacea

Acne rosacea is a chronic skin disease of unknown aetiology

Features

- typically affects nose, cheeks and forehead
- flushing is often first symptom
- telangiectasia are common
- later develops into persistent erythema with papules and pustules
- rhinophyma

Question stats

A	0.8%
B	2.1%
C	1.9%
D	86.2%
E	8.9%

86.2% of users answered this question correctly

Session score = 47.4%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Rosacea guidelines

- ocular involvement: blepharitis

Management

- topical metronidazole may be used for mild symptoms (i.e. Limited number of papules and pustules, no plaques)
- more severe disease is treated with systemic antibiotics e.g. Oxytetracycline
- recommend daily application of a high-factor sunscreen
- camouflage creams may help conceal redness
- laser therapy may be appropriate for patients with prominent telangiectasia

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 6 of 40



An 80-year-old woman presents due a 'sore' on the medial aspect of her right eye:



What is the most likely diagnosis?



- A. Basal cell carcinoma
- B. Squamous cell carcinoma
- C. Chalazion
- D. Styne
- E. Indurated dacryocystitis

The rolled, pearly edges with telangiectasia on the inferior border of the lesion make basal cell carcinoma the most likely diagnosis.

Basal cell carcinoma

Basal cell carcinoma (BCC) is one of the three main types of skin cancer. Lesions are also known as rodent ulcers and are characterised by slow-growth and local invasion. Metastases are extremely rare. BCC is the most common type of cancer in the Western world.

Features

- many types of BCC are described. The most common type is nodular BCC, which is described here
- sun-exposed sites, especially the head and neck account for the majority of lesions
- initially a pearly, flesh-coloured papule with telangiectasia
- may later ulcerate leaving a central 'crater'

Management options:

- surgical removal

Question stats

A	<div style="width: 78.6%;"></div>	78.6%
B	<div style="width: 11.2%;"></div>	11.2%
C	<div style="width: 0.8%;"></div>	0.8%
D	<div style="width: 0.1%;"></div>	0.1%
E	<div style="width: 9.2%;"></div>	9.2%

78.6% of users answered this question correctly

Session score = 66.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Basal cell carcinoma

- curettage
- cryotherapy
- topical cream: imiquimod, fluorouracil
- radiotherapy



Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 7 of 40



A woman presents with painful erythematous lesions on her shins. Which one of the following is least associated with this presentation?

-  A. **Pregnancy**
- B. Ulcerative colitis
-  C. **Syphilis**
- D. Sarcoidosis
- E. Tuberculosis

It is rare for syphilis to cause erythema nodosum

Erythema nodosum

Overview






- inflammation of subcutaneous fat
- typically causes tender, erythematous, nodular lesions
- usually occurs over shins, may also occur elsewhere (e.g. forearms, thighs)
- usually resolves within 6 weeks
- lesions heal without scarring

Causes

- infection: streptococci, TB, brucellosis
- systemic disease: sarcoidosis, inflammatory bowel disease, Behcet's
- malignancy/lymphoma
- drugs: penicillins, sulphonamides, combined oral contraceptive pill
- pregnancy

Rate question:

Question stats

A		20.5%
B		5.1%
C		66.5%
D		2.2%
E		5.7%

66.5% of users answered this question correctly

Session score = 57.1%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema nodosum

Question 8 of 40 ✗



A 56-year-old man with a history of epilepsy, atrial fibrillation and ischaemic heart disease is noted to have a rash on his forearms and face. Which one of the following drugs is most likely to be responsible?



- A. Verapamil
- B. Carbamazepine
- C. Amiodarone
- D. Digoxin
- E. Clopidogrel

A rash on the forearms and face is typical of a photosensitivity rash

Drugs causing photosensitivity

Causes of drug-induced photosensitivity

- thiazides
- tetracyclines, sulphonamides, ciprofloxacin
- amiodarone
- NSAIDs e.g. piroxicam
- psoralens
- sulphonylureas

Rate question:

Question stats

A	<div style="width: 4.9%;"></div>	4.9%
B	<div style="width: 36.3%;"></div>	36.3%
C	<div style="width: 52%;"></div>	52%
D	<div style="width: 2.8%;"></div>	2.8%
E	<div style="width: 3.9%;"></div>	3.9%

52% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 9 of 40



A 75-year-old asks you to have a look at a lesion on his right ear. It has developed slowly over the past few months and is tender to palpation.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Cystic chondromalacia
- B. Actinic keratosis
- ✓ C. **Chondrodermatitis nodularis helicis**
- D. Perichondritis
- E. Keratin horn

Question stats

A	1.2%
B	11.2%
C	83.7%
D	1%
E	2.9%

83.7% of users answered this question correctly

Session score = 55.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Chondrodermatitis nodularis helicis

Chondrodermatitis nodularis helicis (CNH) is a common and benign condition characterised by the development of a painful nodule on the ear. It is thought to be caused by factors such as persistent pressure on the ear (e.g. secondary to sleep, headsets), trauma or cold. CNH is more common in men and with increasing age.

Management

- reducing pressure on the ear: foam 'ear protectors' may be used during sleep
- other treatment options include cryotherapy, steroid injection, collagen

- injection
- surgical treatment may be used but there is a high recurrence rate

Rate question:

Question 10 of 40


Which one of the following is not a management option for patients with hyperhidrosis?

- A. Endoscopic transthoracic sympathectomy
- B. Iontophoresis
- C. Topical aluminium chloride
- D. Botulinum toxin
- E. **Topical atropine**


Question stats

A		4.3%
B		9.9%
C		2.7%
D		4.8%
E		78.3%

78.3% of users answered this question correctly

Session score = 60%

Hyperhidrosis

Hyperhidrosis describes the excessive production of sweat

Management options include

- topical aluminium chloride preparations are first-line. Main side effect is skin irritation
- iontophoresis: particularly useful for patients with palmar, plantar and axillary hyperhidrosis
- botulinum toxin: currently licensed for axillary symptoms
- surgery: e.g. Endoscopic transthoracic sympathectomy. Patients should be made aware of the risk of compensatory sweating

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)
Hyperhidrosis guidelines

Question 11 of 40


Which one of the following nails changes is least likely to occur in psoriasis?

- X** A. Loss of nail
- B. Onycholysis
- C. Pitting
- D. Subungual hyperkeratosis
- ✓** E. Yellow nail syndrome

Question stats

A		17%
B		3.7%
C		3.2%
D		9.5%
E		66.7%

66.7% of users answered this question correctly

Session score = 54.5%

Psoriasis: nail changes

Psoriatic nail changes affect both fingers and toes and do not reflect the severity of psoriasis but there is an association with psoriatic arthropathy

Nail changes seen in psoriasis

- pitting
- onycholysis
- subungual hyperkeratosis
- loss of nail

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

Question 12 of 40



A 20-year-old woman presents after developing a white patch on her left foot:



Image used on license from [DermNet NZ](#)

Question stats

A	8.4%
B	5.7%
C	71%
D	6.1%
E	8.9%

71% of users answered this question correctly

Session score = 58.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Vitiligo

Which one of the following statements regarding the diagnosis is correct?

- A. It is seen in around 0.1% of patients
- B. The average age of onset is 40-50 years
- ✓ C. Skin trauma may precipitate new skin lesions
- D. It is rare in Caucasian people
- E. The torso tends to be affected first

This is known as the Koebner phenomenon

Vitiligo

Vitiligo is an autoimmune condition which results in the loss of melanocytes and consequent depigmentation of the skin. It is thought to affect around 1% of the population and symptoms typically develop by the age of 20-30 years.

Features

- well demarcated patches of depigmented skin
- the peripheries tend to be most affected
- trauma may precipitate new lesions (Koebner phenomenon)

Associated conditions

- type 1 diabetes mellitus
- Addison's disease
- autoimmune thyroid disorders
- pernicious anaemia
- alopecia areata

Management

- sun block for affected areas of skin
- camouflage make-up
- topical corticosteroids may reverse the changes if applied early
- there may also be a role for topical tacrolimus and phototherapy, although caution needs to be exercised with light-skinned patients

Rate question:

Question 13 of 40



A 67-year-old man is diagnosed with actinic keratoses on his right temple and prescribed fluorouracil cream. One week later he presents as the skin where he is applying treatment has become red and sore. On examination there is no sign of weeping or blistering. What is the most appropriate action?



- A. Continue fluorouracil cream + review in 1 week
- B. Complete a 'Yellow Card'
- C. Stop fluorouracil cream + prescribe topical hydrocortisone
- D. Switch to topical diclofenac
- E. Stop fluorouracil cream

This is a normal reaction to treatment. Fluorouracil should be continued for at least another week before starting topical steroids.

Actinic keratoses

Actinic, or solar, keratoses (AK) is a common premalignant skin lesion that develops as a consequence of chronic sun exposure

Features

- small, crusty or scaly, lesions
- may be pink, red, brown or the same colour as the skin
- typically on sun-exposed areas e.g. temples of head
- multiple lesions may be present

Management options include

- prevention of further risk: e.g. sun avoidance, sun cream
- fluorouracil cream: typically a 2 to 3 week course. The skin will become red and inflamed - sometimes topical hydrocortisone is given following fluorouracil to help settle the inflammation
- topical diclofenac: may be used for mild AKs. Moderate efficacy but much fewer side-effects
- topical imiquimod: trials have shown good efficacy
- cryotherapy
- curettage and cautery

Rate question:

Question stats

A	<div style="width: 50.8%;"></div>	50.8%
B	<div style="width: 1.4%;"></div>	1.4%
C	<div style="width: 32.4%;"></div>	32.4%
D	<div style="width: 9.1%;"></div>	9.1%
E	<div style="width: 6.3%;"></div>	6.3%

50.8% of users answered this question correctly

Session score = 61.5%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

2007 Actinic keratoses guidelines

[DermNet NZ](#)

Actinic keratoses

Question 14 of 40


Which of the following conditions is most associated with onycholysis?



- A. Bullous pemphigoid
- B. Raynaud's disease
- C. Osteogenesis imperfecta
- D. Oesophageal cancer
- E. Scabies

Raynaud's disease causes onycholysis, as can any cause of impaired circulation

Onycholysis

Onycholysis describes the separation of the nail plate from the nail bed

Causes

- idiopathic
- trauma e.g. Excessive manicuring
- infection: especially fungal
- skin disease: psoriasis, dermatitis
- impaired peripheral circulation e.g. Raynaud's
- systemic disease: hyper- and hypothyroidism

Rate question:

Question stats

A		17%
B		41.5%
C		20.3%
D		15.8%
E		5.4%

41.5% of users answered this question correctly

Session score = 64.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermIS.net](#)

Picture of onycholysis

Question 15 of 40



A 69-year-old woman asks you to have a look at her feet. She lives out in Spain most of the year but comes back to the UK periodically to see her family.



Image used on license from [DermNet NZ](#)

She has similar changes on her forehead. The skin is not pruritic. What is the most likely diagnosis?

- A. Discoid lupus erythematosus
- ☒ B. **Photosensitive eczema**
- C. Porokeratosis
- ☒ D. **Actinic keratoses**
- E. Bowen's disease

Actinic keratoses may develop on any sun-exposed area, not just the forehead and temple. Bowen's disease tends to be isolated and well demarcated.

Actinic keratoses

Actinic, or solar, keratoses (AK) is a common premalignant skin lesion that develops as a consequence of chronic sun exposure

Features

- small, crusty or scaly, lesions
- may be pink, red, brown or the same colour as the skin
- typically on sun-exposed areas e.g. temples of head

Question stats

A	2.8%
B	19.1%
C	6.3%
D	67.9%
E	3.9%

67.9% of users answered this question correctly

Session score = 60%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

2007 Actinic keratoses guidelines

[DermNet NZ](#)

Actinic keratoses

multiple lesions may be present

Management options include

- prevention of further risk: e.g. sun avoidance, sun cream
- fluorouracil cream: typically a 2 to 3 week course. The skin will become red and inflamed - sometimes topical hydrocortisone is given following fluorouracil to help settle the inflammation
- topical diclofenac: may be used for mild AKs. Moderate efficacy but much fewer side-effects
- topical imiquimod: trials have shown good efficacy
- cryotherapy
- curettage and cautery

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 2 of 231



A 60-year-old woman presents a 'painful rash' on her left shin. This has been present for the past three days. On examination her pulse is 72 / min and temperature is 36.9°C:



Image used on license from [DermNet NZ](#)

Question stats

A	1.5%
B	71.2%
C	18.6%
D	7.1%
E	1.6%

71.2% of users answered this question correctly

Session score = 100%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

What is the most appropriate management?



- A. Enquire about domestic violence
- B. Oral flucloxacillin
- C. Refer for low-molecular weight heparin
- D. Refer for intravenous antibiotics
- E. Topical clotrimazole

Cellulitis: management

The BNF recommends flucloxacillin as first-line treatment for mild/moderate cellulitis. Erythromycin is recommended in patients allergic to penicillin. Treatment failure is now commonly treated with oral clindamycin.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 20 of 231



A 62-year-old woman presents with painful 'bruises' on her shins and forearms.



Image used on license from [DermNet NZ](#)

She cannot remember knocking herself. What is the most likely diagnosis?

- A. Idiopathic thrombocytopenic purpura
- B. Erythema ab igne
- C. Thrombotic thrombocytopenic purpura
- ✓ D. Erythema nodosum
- E. Cellulitis

Question stats

A	17.5%
B	4.4%
C	5.4%
D	71.9%
E	0.8%

71.9% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema nodosum

Erythema nodosum

Overview

- inflammation of subcutaneous fat
- typically causes tender, erythematous, nodular lesions
- usually occurs over shins, may also occur elsewhere (e.g. forearms, thighs)
- usually resolves within 6 weeks
- lesions heal without scarring

Causes

- infection: streptococci, TB, brucellosis
- systemic disease: sarcoidosis, inflammatory bowel disease, Behcet's
- malignancy/lymphoma
- drugs: penicillins, sulphonamides, combined oral contraceptive pill
- pregnancy

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 16 of 40



A woman who is 24 weeks pregnant presents with a rash:



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Pityriasis rosea
- B. Pompholyx
- C. Primary herpes simplex infection
- ☒ D. Polymorphic eruption of pregnancy
- ☐ E. Pemphigoid gestationis

The blistering lesions are clearly visible on this image.

Skin disorders associated with pregnancy

Polymorphic eruption of pregnancy

- pruritic condition associated with last trimester
- lesions often first appear in abdominal striae
- management depends on severity: emollients, mild potency topical steroids and oral steroids may be used

Pemphigoid gestationis

- pruritic blistering lesions
- often develop in peri-umbilical region, later spreading to the trunk, back,

Question stats

A	1.8%
B	2.2%
C	3.2%
D	21.9%
E	70.9%

70.9% of users answered this question correctly

Session score = 56.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Polymorphic eruption of pregnancy

[DermNet NZ](#)

Pemphigoid gestationis

buttocks and arms

- usually presents 2nd or 3rd trimester and is rarely seen in the first pregnancy
- oral corticosteroids are usually required

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 17 of 40



Which one of the following is least recognised as a cause of erythroderma in the UK?

- ✗ A. Lymphoma
 B. Drug eruption
✓ C. Lichen planus
 D. Psoriasis
 E. Eczema

Question stats

A	<div style="width: 26.7%;"></div>	26.7%
B	<div style="width: 3.6%;"></div>	3.6%
C	<div style="width: 55.8%;"></div>	55.8%
D	<div style="width: 5.5%;"></div>	5.5%
E	<div style="width: 8.4%;"></div>	8.4%

55.8% of users answered this question correctly

Session score = 52.9%

Erythroderma

Erythroderma is a term used when more than 95% of the skin is involved in a rash of any kind

Causes of erythroderma

- eczema
- psoriasis
- drugs e.g. gold
- lymphoma, leukaemia
- idiopathic

Erythrodermic psoriasis

- may result from progression of chronic disease to an exfoliative phase with plaques covering most of the body. Associated with mild systemic upset
- more serious form is an acute deterioration. This may be triggered by a variety of factors such as withdrawal of systemic steroids. Patients need to be admitted to hospital for management

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 18 of 40



Which one of the following conditions is least associated with pruritus?

- ✓ A. Pemphigus vulgaris
- ✗ B. Iron-deficiency anaemia
- C. Polycythaemia
- D. Chronic renal failure
- E. Scabies

Pemphigus vulgaris is an autoimmune bullous disease of the skin. It is not commonly associated with pruritus

Pruritus

The table below lists the main characteristics of the most important causes of pruritus

Liver disease	History of alcohol excess Stigmata of chronic liver disease: spider naevi, bruising, palmar erythema, gynaecomastia etc Evidence of decompensation: ascites, jaundice, encephalopathy
Iron deficiency anaemia	Pallor Other signs: koilonychia, atrophic glossitis, post-cricoid webs, angular stomatitis
Polycythaemia	Pruritus particularly after warm bath 'Ruddy complexion' Gout Peptic ulcer disease
Chronic kidney disease	Lethargy & pallor Oedema & weight gain Hypertension
Lymphoma	Night sweats Lymphadenopathy Splenomegaly, hepatomegaly Fatigue

Other causes:

- hyper- and hypothyroidism
- diabetes
- pregnancy
- 'senile' pruritus
- urticaria
- skin disorders: eczema, scabies, psoriasis, pityriasis rosea

Question stats

A	56.1%
B	28.7%
C	12.7%
D	2.3%
E	0.2%

56.1% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 19 of 40



A 43-year-old man presents to his GP due to skin lesions on the back of his hands and the extensor aspects of his arms. On examination there are a number of smooth, firm, papules as shown below:



What is the most likely diagnosis?

- A. Lupus vulgaris
- ☒ B. Livedo reticularis
- C. Guttate psoriasis
- ☒ D. Granuloma annulare
- E. Pyoderma gangrenosum

Question stats

A	18.2%
B	17.2%
C	19.5%
D	43.5%
E	1.5%

43.5% of users answered this question correctly

Session score = 47.4%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of granuloma annulare

Granuloma annulare

Basics

- papular lesions that are often slightly hyperpigmented and depressed centrally
- typically occur on the dorsal surfaces of the hands and feet, and on the extensor aspects of the arms and legs

A number of associations have been proposed to conditions such as diabetes mellitus but there is only weak evidence for this

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 20 of 40



Which of the following skin disorders is most associated with antiphospholipid syndrome?



- A. Lichen sclerosis
- B. Lichen planus
- C. Livedo reticularis
- D. Lupus vulgaris
- E. Psoriasis

Antiphospholipid syndrome: arterial/venous thrombosis, miscarriage, livedo reticularis

Livedo reticularis is the skin rash most commonly associated with antiphospholipid syndrome. Lupus vulgaris is seen in tuberculosis

Antiphospholipid syndrome

Antiphospholipid syndrome is an acquired disorder characterised by a predisposition to both venous and arterial thromboses, recurrent fetal loss and thrombocytopenia. It may occur as a primary disorder or secondary to other conditions, most commonly systemic lupus erythematosus (SLE)

A key point for the exam is to appreciate that antiphospholipid syndrome causes a paradoxical rise in the APTT. This is due to an ex-vivo reaction of the lupus anticoagulant autoantibodies with phospholipids involved in the coagulation cascade

Features

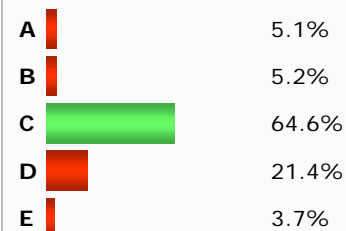
- venous/arterial thrombosis
- recurrent fetal loss
- livedo reticularis
- thrombocytopenia
- prolonged APTT
- other features: pre-eclampsia, pulmonary hypertension

Associations other than SLE

- other autoimmune disorders
- lymphoproliferative disorders
- phenothiazines (rare)

Management - based on BCSH guidelines

Question stats



64.6% of users answered this question correctly

Session score = 45%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermIS.net](#)

Picture of livedo reticularis

[BCSH](#)

Antiphospholipid syndrome guidelines

- initial venous thromboembolic events: evidence currently supports use of warfarin with a target INR of 2-3 for 6 months
- recurrent venous thromboembolic events: lifelong warfarin; if occurred whilst taking warfarin then increase target INR to 3-4
- arterial thrombosis should be treated with lifelong warfarin with target INR 2-3

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 21 of 40



A 34-year-old patient who is known to have psoriasis presents with erythematous skin in the groin and genital area. He also has erythematous skin in the axilla. In the past he has expressed a dislike of messy or cumbersome creams. What is the most appropriate treatment?

- ✓ A. Topical steroid
- B. Topical dithranol
- C. Topical clotrimazole
- D. Coal tar
- ✗ E. Topical calcipotriol

Flexural psoriasis - topical steroid

This patient has flexural psoriasis which responds well to topical steroids. Topical calcipotriol is usually irritant in flexures. Mild tar preparations are an option but may be messy and cumbersome.

Psoriasis: management

SIGN released guidelines in 2010 on the management of psoriasis and psoriatic arthropathy. Please see the link for more details.

Chronic plaque psoriasis

- regular emollients may help to reduce scale loss and reduce pruritus
- for acute control SIGN recommend: 'Short term intermittent use of a potent topical corticosteroid or a combined potent corticosteroid plus calcipotriol

ointment is recommended to gain rapid improvement in plaque psoriasis.'

- 'For long term topical treatment of plaque psoriasis a vitamin D analogue (e.g. Calcipotriol) is recommended.'
- 'If a vitamin D analogue is ineffective or not tolerated then consider coal tar (solution, cream or lotion), tazarotene gel, or short contact dithranol (30 minute exposure in patients with a small number of relatively large plaques of psoriasis).

Steroids in psoriasis

- topical steroids are commonly used in flexural psoriasis and there is also a role for mild steroids in facial psoriasis. If steroids are ineffective for these conditions vitamin D analogues or tacrolimus ointment should be used second line
- SIGN caution against the long term use of potent or very potent topical steroids due to the risk of side-effects

Question stats

A	<div></div>	46.6%
B	<div></div>	7.6%
C	<div></div>	15.4%
D	<div></div>	1.9%
E	<div></div>	28.5%

46.6% of users answered this question correctly

Session score = 42.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[SIGN](#)

2010 Psoriasis guidelines

Scalp psoriasis

- for short term control SIGN recommend either the use of potent topical corticosteroids or a combination of a potent corticosteroid and a vitamin D

analogue

- 'For patients with thick scaling of the scalp, initial treatment with overnight application of salicylic acid, tar preparations, or oil preparations (eg olive oil, coconut oil) to remove thick scale is recommended.

Secondary care management

Phototherapy

- narrow band ultraviolet B light (311-313nm) is now the treatment of choice
- photochemotherapy is also used - psoralen + ultraviolet A light (PUVA)
- adverse effects: skin ageing, squamous cell cancer (not melanoma)

Systemic therapy

- methotrexate: useful if associated joint disease
- ciclosporin
- systemic retinoids
- biological agents: infliximab, etanercept and adalimumab
- ustekinumab (IL-12 and IL-23 blocker) is showing promise in early trials

Mechanism of action of commonly used drugs:

- coal tar: probably inhibit DNA synthesis
- calcipotriol: vitamin D analogue which reduces epidermal proliferation and restores a normal horny layer
- dithranol: inhibits DNA synthesis, wash off after 30 mins, SE: burning, staining

Rate question:

Question 22 of 40



A 40-year-old man is suspected of having tinea capitis. Scalp scrapings and a plucked hair are sent off and show a *Trichophyton tonsurans* infection. What is the most suitable management?



- Oral terbinafine with topical ketoconazole shampoo for the first 2 weeks
- Oral itraconazole with topical ketoconazole shampoo for the first 2 weeks
- Refer to dermatology
- Topical ketoconazole shampoo
- Oral fluconazole



Question stats

A		38.7%
B		19.9%
C		1.7%
D		37.4%
E		2.4%

38.7% of users answered this question correctly

Session score = 40.9%

Tinea

Tinea is a term given to dermatophyte fungal infections. Three main types of infection are described depending on what part of the body is infected

- tinea capitis - scalp
- tinea corporis - trunk, legs or arms
- tinea pedis - feet

Tinea capitis (scalp ringworm)

- a cause of scarring alopecia mainly seen in children
- if untreated a raised, pustular, spongy/boggy mass called a kerion may form
- most common cause is *Trichophyton tonsurans* in the UK and the USA
- may also be caused by *Microsporum canis* acquired from cats or dogs
- diagnosis: lesions due to *Microsporum canis* green fluorescence under Wood's lamp*. However the most useful investigation is scalp scrapings
- management (based on CKS guidelines): oral antifungals: terbinafine for *Trichophyton tonsurans* infections and griseofulvin for *Microsporum* infections. Topical ketoconazole shampoo should be given for the first two weeks to reduce transmission

Tinea corporis

- causes include *Trichophyton rubrum* and *Trichophyton verrucosum* (e.g. From contact with cattle)
- well-defined annular, erythematous lesions with pustules and papules
- may be treated with oral fluconazole

Tinea pedis (athlete's foot)

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Fungal skin infection - scalp

- characterised by itchy, peeling skin between the toes
- common in adolescence

*lesions due to Trichophyton species do not readily fluoresce under Wood's lamp

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 23 of 40



A man presents with an area of dermatitis on his left wrist. He thinks he may be allergic to nickel. Which one of the following is the best test to investigate this possibility?



- A. Skin patch test
- B. Radioallergosorbent test (RAST)
- C. Nickel IgG levels
- D. Skin prick test
- E. Nickel IgM levels

Question stats

A	<div style="width: 85.8%;"></div>	85.8%
B	<div style="width: 3.7%;"></div>	3.7%
C	<div style="width: 0.9%;"></div>	0.9%
D	<div style="width: 8.8%;"></div>	8.8%
E	<div style="width: 0.8%;"></div>	0.8%

85.8% of users answered this question correctly

Session score = 43.5%

Allergy tests

Skin prick test	<p>Most commonly used test as easy to perform and inexpensive. Drops of diluted allergen are placed on the skin after which the skin is pierced using a needle. A large number of allergens can be tested in one session. Normally includes a histamine (positive) and sterile water (negative) control. A wheal will typically develop if a patient has an allergy. Can be interpreted after 15 minutes</p> <p>Useful for food allergies and also pollen</p>
Radioallergosorbent test (RAST)	<p>Determines the amount of IgE that reacts specifically with suspected or known allergens, for example IgE to egg protein. Results are given in grades from 0 (negative) to 6 (strongly positive)</p> <p>Useful for food allergies, inhaled allergens (e.g. Pollen) and wasp/bee venom</p> <p>Blood tests may be used when skin prick tests are not suitable, for example if there is extensive eczema or if the patient is taking antihistamines</p>
Skin patch testing	<p>Useful for contact dermatitis. Around 30-40 allergens are placed on the back. Irritants may also be tested for. The patches are removed 48 hours later with the results being read by a dermatologist after a further 48 hours</p>

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

Question 24 of 40



This patient is known to suffer from Raynaud's phenomenon:



Image used on license from [DermNet NZ](#)

Question stats

A	45.7%
B	5.8%
C	37.3%
D	5.7%
E	5.5%

37.3% of users answered this question correctly

Session score = 41.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

What does the lesion on her thumb most likely represent?

- A. Arterial ulcer
- B. Gouty tophus
- C. Calcium deposit
- D. Orf
- E. Xanthomata



This lesion represents calcinosis.

Systemic sclerosis

Systemic sclerosis is a condition of unknown aetiology characterised by hardened, sclerotic skin and other connective tissues. It is four times more common in females

There are three patterns of disease:

Limited cutaneous systemic sclerosis

- Raynaud's may be first sign
- scleroderma affects face and distal limbs predominately
- associated with anti-centromere antibodies

a subtype of limited systemic sclerosis is CREST syndrome: Calcinosis, Raynaud's phenomenon, oEsophageal dysmotility, Sclerodactyly, Telangiectasia

Diffuse cutaneous systemic sclerosis

- scleroderma affects trunk and proximal limbs predominately
- associated with scl-70 antibodies
- hypertension, lung fibrosis and renal involvement seen
- poor prognosis

Scleroderma (without internal organ involvement)

- tightening and fibrosis of skin
- may be manifest as plaques (morphoea) or linear

Antibodies

- ANA positive in 90%
- RF positive in 30%
- anti-scl-70 antibodies associated with diffuse cutaneous systemic sclerosis
- anti-centromere antibodies associated with limited cutaneous systemic sclerosis

Rate question:

Question 25 of 40


A 24-year-old female with a history of anorexia nervosa presents with red crusted lesions around the corner of her mouth and below her lower lip. What is she most likely to be deficient in?



- A. **Zinc**
- B. Tocopherol
- C. Pantothenic acid
- D. Thiamine
- E. Magnesium

Vitamin B2 (riboflavin) deficiency may also cause angular cheilosis.

Zinc deficiency
Features

- perioral dermatitis: red, crusted lesions
- acrodermatitis
- alopecia
- short stature
- hypogonadism
- hepatosplenomegaly
- geophagia (ingesting clay/soil)
- cognitive impairment

Rate question:
Question stats

A		58.3%
B		3.4%
C		6%
D		26.3%
E		6.1%

58.3% of users answered this question correctly

Session score = 44%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 21 of 231


A 55-year-old man asks you to have a look at some 'red spots' on his torso. They have been present for about the past six months.



Image used on license from [DermNet NZ](#)



What is the most likely diagnosis?

- A. Kaposi sarcoma
- B. Blue rubber bleb naevus syndrome
- C. Thrombocytopaenia
- D. Malignant melanoma
- ✓ E. **Cherry haemangioma**

Question stats

A	3.9%
B	3.6%
C	0.5%
D	1.5%
E	90.5%

90.5% of users answered this question correctly

Session score = 52.4%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Cherry haemangioma

Cherry haemangiomas (Campbell de Morgan spots) are benign skin lesions which contain an abnormal proliferation of capillaries. They are more common with advancing age and affect men and women equally.

Features

- erythematous, papular lesions
- typically 1-3 mm in size
- non-blanching
- not found on the mucous membranes

As they are benign no treatment is usually required.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 26 of 40


Which one of the following is least associated with acanthosis nigricans?

- A. Oral contraceptive pill
- B. Obesity
- C. Polycystic ovarian syndrome
- D. Insulin-resistant diabetes mellitus
- E. **Hyperthyroidism**


Question stats

A		8.9%
B		8.1%
C		1.4%
D		3.2%
E		78.4%

78.4% of users answered this question correctly

Session score = 46.2%

Acanthosis nigricans

Describes symmetrical, brown, velvety plaques that are often found on the neck, axilla and groin

Causes

- gastrointestinal cancer
- insulin-resistant diabetes mellitus
- obesity
- polycystic ovarian syndrome
- acromegaly
- Cushing's disease
- hypothyroidism
- familial
- Prader-Willi syndrome
- drugs: oral contraceptive pill, nicotinic acid

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Acanthosis nigricans

Rate question:

Question 27 of 40



Which one of the following types of rash is most often seen in early Lyme disease?

- A. Erythema nodosum
- B. Psoriasis
- C. Erythema marginatum
- D. Erythema ab igne
- E. Erythema chronicum migrans



Question stats

A	5.2%
B	0.2%
C	34.9%
D	3.3%
E	56.4%

56.4% of users answered this question correctly

Session score = 44.4%

Other skin rashes associated with Lyme disease include acrodermatitis chronica atrophicans and Borrelia lymphocytosis. Erythema marginatum is seen in rheumatic fever whilst erythema ab igne refers to skin that is reddened secondary to long-term exposure to infrared radiation

Lyme disease

Lyme disease is caused by the spirochaete *Borrelia burgdorferi* and is spread by ticks

Features

- early: erythema chronicum migrans + systemic features (fever, arthralgia)
- CVS: heart block, myocarditis
- neuro: cranial nerve palsies, meningitis

Investigation

- serology: antibodies to *Borrelia burgdorferi*

Management

- doxycycline if early disease
- ceftriaxone if disseminated disease
- Jarisch-Herxheimer reaction is sometimes seen after initiating therapy: fever, rash, tachycardia after first dose of antibiotic (more commonly seen in syphilis, another spirochaetal disease)

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 28 of 40



A 43-year-old man is admitted to the Emergency Department with a rash and feeling generally unwell. He is known to have epilepsy and his medication was recently changed to phenytoin three weeks ago. Around one week ago he started to develop mouth ulcers associated with malaise and a cough. Two days ago he started to develop a widespread red rash which has now coalesced to form large fluid-filled blisters, covering around 30% of his body area. The lesions separate when slight pressure is applied. On examination his temperature is 38.3°C and pulse 126 / min. Blood results show:

Na ⁺	144 mmol/l
K ⁺	4.2 mmol/l
Bicarbonate	19 mmol/l
Urea	13.4 mmol/l
Creatinine	121 µmol/l

What is the most likely diagnosis?

- A. Phenytoin-induced neutropaenia
- B. Drug-induced lupus
- C. Kawasaki disease
- ☒ D. Toxic epidermal necrolysis
- ☐ E. Staphylococcal Scalded Skin syndrome

Toxic epidermal necrolysis

Toxic epidermal necrolysis (TEN) is a potentially life-threatening skin disorder that is most commonly seen secondary to a drug reaction. In this condition the skin develops a scalded appearance over an extensive area. Some authors consider TEN to be the severe end of a spectrum of skin disorders which includes erythema multiforme and Stevens-Johnson syndrome

Features

- systemically unwell e.g. pyrexia, tachycardic
- positive Nikolsky's sign: the epidermis separates with mild lateral pressure

Drugs known to induce TEN

- phenytoin
- sulphonamides
- allopurinol

Question stats

A	3.8%
B	7.7%
C	2.3%
D	76.2%
E	10%

76.2% of users answered this question correctly

Session score = 42.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of TEN

- penicillins
- carbamazepine
- NSAIDs

Management

- stop precipitating factor
- supportive care, often in intensive care unit
- intravenous immunoglobulin has been shown to be effective and is now commonly used first-line
- other treatment options include: immunosuppressive agents (ciclosporin and cyclophosphamide), plasmapheresis

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 29 of 40



You review a 31-year-old woman who has had Crohn's disease for the past 12 years. She is currently on infliximab therapy.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?



- A. **Pyoderma gangrenosum**
- B. Acute febrile neutrophilic dermatosis
- C. Squamous cell carcinoma
- D. Pyogenic granuloma
- E. Behcet's disease

Question stats

A	<div style="width: 65.1%;"></div>	65.1%
B	<div style="width: 13%;"></div>	13%
C	<div style="width: 1.2%;"></div>	1.2%
D	<div style="width: 15.8%;"></div>	15.8%
E	<div style="width: 4.9%;"></div>	4.9%

65.1% of users answered this question correctly

Session score = 44.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of pyoderma gangrenosum

[DermNet NZ](#)

Stoma skin problems

Pyoderma gangrenosum

Features

- typically on the lower limbs
- initially small red papule
- later deep, red, necrotic ulcers with a violaceous border
- may be accompanied systemic symptoms e.g. Fever, myalgia

Causes*

- idiopathic in 50%

- inflammatory bowel disease: ulcerative colitis, Crohn's
- rheumatoid arthritis, SLE
- myeloproliferative disorders
- lymphoma, myeloid leukaemias
- monoclonal gammopathy (IgA)
- primary biliary cirrhosis

Management

- the potential for rapid progression is high in most patients and most doctors advocate oral steroids as first-line treatment
- other immunosuppressive therapy, for example ciclosporin and infliximab, have a role in difficult cases

*note whilst pyoderma gangrenosum can occur in diabetes mellitus it is rare and is generally not included in a differential of potential causes

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 30 of 40



A 31-year-old man develops an erythematous rash overnight:



Which one of the following conditions is most strongly associated with this type of rash?



A. Crohn's disease

B. Tuberculosis

C. Sarcoidosis



D. Herpes simplex virus

E. Staphylococcal infections

Question stats

A	9.7%
B	2.7%
C	12.1%
D	32.9%
E	42.6%

32.9% of users answered this question correctly

Session score = 43.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema multiforme

This is difficult as there are many possible triggers for erythema multiforme. However, studies suggest that HSV is the trigger in over 50% of cases. Sarcoidosis is more strongly associated with erythema nodosum.

Erythema multiforme

Features

- target lesions
- initially seen on the back of the hands / feet before spreading to the torso
- upper limbs are more commonly affected than the lower limbs
- pruritus is occasionally seen and is usually mild

If symptoms are severe and involve blistering and mucosal involvement the term

Stevens-Johnson syndrome is used.

Causes

- viruses: herpes simplex virus (the most common cause), Orf*
- idiopathic
- bacteria: *Mycoplasma*, *Streptococcus*
- drugs: penicillin, sulphonamides, carbamazepine, allopurinol, NSAIDs, oral contraceptive pill, nevirapine
- connective tissue disease e.g. Systemic lupus erythematosus
- sarcoidosis
- malignancy

*Orf is a skin disease of sheep and goats caused by a parapox virus

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 31 of 40

A 25-year-old woman asks you to look at her tongue. It has had this appearance for 'a few months' and she is asymptomatic.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Oral lichen planus
- B. Iron-deficiency anaemia
- C. Vitamin C deficiency
- ☒ D. Geographic tongue
- E. Oral leukoplakia

Question stats

A	6.7%
B	1.3%
C	0.6%
D	86.9%
E	4.5%

86.9% of users answered this question correctly

Session score = 45.2%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Geographic tongue

Geographic tongue is a benign, chronic condition of unknown cause. It is present in around 1-3% of the population and is more common in females.

Features

- erythematous areas with a white-grey border (the irregular, smooth red areas are said to look like the outline of a map)
- some patients report burning after eating certain food

Management

- reassurance about benign nature

Rate question:

Question 32 of 40



A 19-year-old female with eczema asks for advice about the use of topical steroids. How many finger tip units (FTU) should be used for an entire hand and arm?

- A. 1
- B. 2
- C. 4
- D. 6
- E. 8



Question stats

A	3.8%
B	18.4%
C	59.6%
D	14%
E	4.2%

59.6% of users answered this question correctly

Session score = 46.9%

Eczema: topical steroids

Use weakest steroid cream which controls patients symptoms

The table below shows topical steroids by potency

Mild	Moderate	Potent	Very potent
Hydrocortisone 0.5-2.5%	Betamethasone valerate 0.025% (Betnovate RD) Clobetasone butyrate 0.05% (Eumovate)	Fluticasone propionate 0.05% (Cutivate) Betamethasone valerate 0.1% (Betnovate)	Clobetasol propionate 0.05% (Dermovate)

Finger tip rule

- 1 finger tip unit (FTU) = 0.5 g, sufficient to treat a skin area about twice that of the flat of an adult hand

Topical steroid doses for eczema in adults

Area of skin	Fingertip units per dose
Hand and fingers (front and back)	1.0
A foot (all over)	2.0
Front of chest and abdomen	7.0
Back and buttocks	7.0
Face and neck	2.5
An entire arm and hand	4.0

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

Atopic eczema guidelines

An entire leg and foot	8.0
------------------------	-----

Rate question:

Question 33 of 40


Which one of the following skin disorders is not commonly seen with systemic lupus erythematosus?



- A. **Keratoderma blenorrhagica**
- B. Alopecia
- C. Livedo reticularis
- D. Photosensitivity
- E. Butterfly rash

Keratoderma blenorrhagica describes waxy yellow papules on the palms and soles. It is seen in Reiter's syndrome

Skin disorders associated with SLE

Skin manifestations of systemic lupus erythematosus

- photosensitive 'butterfly' rash
- discoid lupus
- alopecia
- livedo reticularis: net-like rash

Rate question:

Question stats

A		64.6%
B		14.3%
C		15.7%
D		1.5%
E		3.9%

64.6% of users answered this question correctly

Session score = 48.5%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Derm Net NZ](#)

Picture of butterfly rash

[Derm Net NZ](#)

Picture of discoid lupus

[DermIS.net](#)

Picture of livedo reticularis

Questions 38 to 40 of 40



Theme: Causes of pruritus

- A** Liver disease
- B** Hypothyroidism
- C** Diabetes mellitus
- D** Menopause-related pruritus
- E** Chronic kidney disease
- F** Polycythaemia
- G** Iron deficiency anaemia
- H** Tuberculosis
- I** Scabies
- J** Lymphoma

Question stats

Average score for registered users:

38	<div style="width: 64.7%;"></div>	64.7%
39	<div style="width: 84.1%;"></div>	84.1%
40	<div style="width: 63.7%;"></div>	63.7%

Session score = 42.5%

For each of the following scenarios select the most likely diagnosis:

- 38.** A 61-year-old man presents with pruritus. He has had recurrent episodes of painful swelling in the MTP joints and a history of peptic ulcer disease. On examination he has a 'ruddy' complexion



Liver disease

The correct answer is Polycythaemia

- 39.** A 41-year-old woman requests a repeat prescription for citalopram. She also mentions she is constantly itchy and bruises easily. On examination she has reddened palms and a distended abdomen



Hypothyroidism

The correct answer is Liver disease

- 40.** A 37-year-old woman presents with itch and lethargy. She is having difficulty sleeping due to night sweats and is wondering if she may be 'going through the change'.



Menopause-related pruritus

The correct answer is Lymphoma

She is quite young to be going through the menopause. Whilst some menopausal women report itch it is not common

Pruritus

The table below lists the main characteristics of the most important causes of pruritus

Liver disease	History of alcohol excess Stigmata of chronic liver disease: spider naevi, bruising, palmar erythema, gynaecomastia etc Evidence of decompensation: ascites, jaundice, encephalopathy
Iron deficiency anaemia	Pallor Other signs: koilonychia, atrophic glossitis, post-cricoid webs, angular stomatitis
Polycythaemia	Pruritus particularly after warm bath 'Ruddy complexion' Gout Peptic ulcer disease
Chronic kidney disease	Lethargy & pallor Oedema & weight gain Hypertension
Lymphoma	Night sweats Lymphadenopathy Splenomegaly, hepatomegaly Fatigue

Other causes:

- hyper- and hypothyroidism
- diabetes
- pregnancy
- 'senile' pruritus
- urticaria
- skin disorders: eczema, scabies, psoriasis, pityriasis rosea

Rate question:

Question 34 of 40

Please look at the skin lesion shown below:



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Infected chalazion
- B. Actinic keratosis
- C. Indurated dacryocystitis
- D. Keratoacanthoma
- ✓ E. Basal cell carcinoma

Question stats

A	0.7%
B	0.4%
C	3.9%
D	4.1%
E	91%

91% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Basal cell carcinoma

Basal cell carcinoma

Basal cell carcinoma (BCC) is one of the three main types of skin cancer. Lesions are also known as rodent ulcers and are characterised by slow-growth and local invasion. Metastases are extremely rare. BCC is the most common type of cancer in the Western world.

Features

- many types of BCC are described. The most common type is nodular BCC, which is described here
- sun-exposed sites, especially the head and neck account for the majority of lesions
- initially a pearly, flesh-coloured papule with telangiectasia

may later ulcerate leaving a central 'crater'

Management options:

- surgical removal
- curettage
- cryotherapy
- topical cream: imiquimod, fluorouracil
- radiotherapy

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 22 of 231



You are asked to review the heel of an 86-year-old lady by the district nurses. They are concerned she may be developing a pressure ulcer. On examination there is a 3 cm area of erythema on the right heel with a small area of partial thickness skin loss involving the epidermis in the centre. How would you grade the pressure ulcer?



A. Grade 1



B. Grade 2

C. Grade 3

D. Grade 4

E. Grade 5

Question stats

A	5.2%
B	66%
C	26.2%
D	2.5%
E	0.1%

66% of users answered this question correctly

Session score = 50%

Pressure ulcers

The following is based on a 2009 NHS Best Practice Statement. Please see the link for further details. Some selected points are listed below. NICE also published guidelines in 2005.

Pressure ulcers develop in patients who are unable to move parts of their body due to illness, paralysis or advancing age. They typically develop over bony prominences such as the sacrum or heel. The following factors predispose to the development of pressure ulcers:

- malnourishment
- incontinence
- lack of mobility
- pain (leads to a reduction in mobility)

Grading of pressure ulcers - the following is taken from the European Pressure Ulcer Advisory Panel classification system.

Grade 1	Non-blanchable erythema of intact skin. Discolouration of the skin, warmth, oedema, induration or hardness may also be used as indicators, particularly on individuals with darker skin
Grade 2	Partial thickness skin loss involving epidermis or dermis, or both. The ulcer is superficial and presents clinically as an abrasion or blister
Grade 3	Full thickness skin loss involving damage to or necrosis of subcutaneous tissue that may extend down to, but not through, underlying fascia.
Grade 4	Extensive destruction, tissue necrosis, or damage to muscle, bone or supporting structures with or without full thickness skin loss

RCGP curriculum

9 - Care of Older Adults

[Curriculum statement](#)

External links

[NHS](#)

Prevention and management of pressure ulcers

[NICE](#)

The prevention and treatment of pressure ulcers

Management

- a moist wound environment encourages ulcer healing. Hydrocolloid dressings and hydrogels may help facilitate this. The use of soap should be discouraged to avoid drying the wound
- wound swabs should not be done routinely as the vast majority of pressure ulcers are colonised with bacteria. The decision to use systemic antibiotics should be taken on a clinical basis (e.g. Evidence of surrounding cellulitis)
- consider referral to the tissue viability nurse
- surgical debridement may be beneficial for selected wounds

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 35 of 40



Which one of the following features is least associated with acne rosacea?

- ✓ A. Pruritus
- B. Blepharitis
- C. Flushing
- ✗ D. Pustules
- E. Rhinophyma

Pruritus is not a common feature of acne rosacea.

Acne rosacea

Acne rosacea is a chronic skin disease of unknown aetiology

Features

- typically affects nose, cheeks and forehead
- flushing is often first symptom
- telangiectasia are common
- later develops into persistent erythema with papules and pustules
- rhinophyma
- ocular involvement: blepharitis

Management

- topical metronidazole may be used for mild symptoms (i.e. Limited number of papules and pustules, no plaques)
- more severe disease is treated with systemic antibiotics e.g. Oxytetracycline
- recommend daily application of a high-factor sunscreen
- camouflage creams may help conceal redness
- laser therapy may be appropriate for patients with prominent telangiectasia

Rate question:

Question stats

A	<div></div>	55.7%
B	<div></div>	25.5%
C	<div></div>	3.5%
D	<div></div>	9.2%
E	<div></div>	6%

55.7% of users answered this question correctly

Session score = 48.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Rosacea guidelines

Question 36 of 40



This 37-year-old woman complains of red itchy skin on her face:



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Acne vulgaris
- B. Acne rosacea
- ☒ C. Seborrhoeic dermatitis
- ☐ D. Erythrasma
- E. Systemic lupus erythematosus

The nasolabial fold dermatitis is typical in this image.

Seborrhoeic dermatitis in adults

Seborrhoeic dermatitis in adults is a chronic dermatitis thought to be caused by an inflammatory reaction related to a proliferation of a normal skin inhabitant, a fungus called *Malassezia furfur* (formerly known as *Pityrosporum ovale*). It is common, affecting around 2% of the general population

Features

- eczematous lesions on the sebum-rich areas: scalp (may cause dandruff), periorbital, auricular and nasolabial folds
- otitis externa and blepharitis may develop

Question stats

A	0.8%
B	21%
C	43.1%
D	28.1%
E	7%

43.1% of users answered this question correctly

Session score = 47.2%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Overview and pictures of seborrhoeic dermatitis

[Clinical Knowledge Summaries](#)

Seborrhoeic dermatitis guidelines

Associated conditions include

- HIV
- Parkinson's disease

Scalp disease management

- over the counter preparations containing zinc pyrithione ('Head & Shoulders') and tar ('Neutrogena T/Gel') are first-line
- the preferred second-line agent is ketoconazole
- selenium sulphide and topical corticosteroid may also be useful

Face and body management

- topical antifungals: e.g. Ketoconazole
- topical steroids: best used for short periods
- difficult to treat - recurrences are common

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 37 of 40


Please look at the image below:



Image used on license from [DermNet NZ](#)

The lesion has been getting bigger for the past few weeks. There is no history of trauma. What is the most likely diagnosis?

- ✗ A. Basal cell carcinoma
✓ B. Seborrhoeic keratosis
✓ C. Bowen's disease
D. Tinea corporis
E. Nummular eczema

Question stats

A	7.2%
B	3.9%
C	58.9%
D	6%
E	24%

58.9% of users answered this question correctly

Session score = 45.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Bowen's disease

Bowen's disease

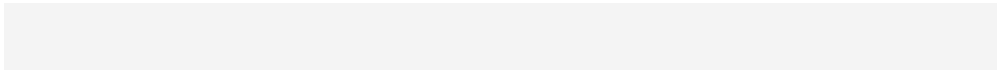
Bowen's disease is a type of intraepidermal squamous cell carcinoma. More common in elderly females. There is around a 3% chance of developing invasive skin cancer

Features

- red, scaly patches

- often occur on the lower limbs

Rate question:



Question 23 of 231





The patient below is being treated for epilepsy:



Image used on license from [DermNet NZ](#) and with the kind permission of Prof Raimo Suhonen

What is the most likely underlying diagnosis?

- A. HIV
-  B. Neurofibromatosis
- C. Arteriovenous malformation
-  D. Tuberous sclerosis
- E. Lennox-Gastaut syndrome

These skin lesions represent adenoma sebaceum.

Tuberous sclerosis

Tuberous sclerosis (TS) is a genetic condition of autosomal dominant inheritance. Like neurofibromatosis, the majority of features seen in TS are neuro-cutaneous

Cutaneous features

- depigmented 'ash-leaf' spots which fluoresce under UV light
- roughened patches of skin over lumbar spine (Shagreen patches)
- adenoma sebaceum: butterfly distribution over nose
- fibromata beneath nails (subungual fibromata)
- café-au-lait spots* may be seen

Question stats

A	4.4%
B	11.3%
C	3.5%
D	62.3%
E	18.5%

62.3% of users answered this question correctly

Session score = 47.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Neurological features

- developmental delay
- epilepsy (infantile spasms or partial)
- intellectual impairment

Also

- retinal hamartomas: dense white areas on retina (phakomata)
- rhabdomyomas of the heart
- gliomatous changes can occur in the brain lesions
- polycystic kidneys, renal angiomyolipomata

*these of course are more commonly associated with neurofibromatosis. However a 1998 study of 106 children with TS found café-au-lait spots in 28% of patients

Rate question:

Question 24 of 231



A 30-year-old man presents with a two-week history of a productive cough. Whilst examining him you notice a large number of atypical naevi over his torso. On his back you count between 20-25 moles. He reports no change in any of his moles, no bleeding and no itch. One particular mole is noted due to the irregular border. It is 6 * 4 mm in size.



What is the most appropriate action?



- A. Refer to dermatology for photo mapping
- B. Refer under the two-week rule to dermatology
- C. Advise about sun protection + arrange gene testing for xeroderma pigmentosum
- D. Advise about sun protection + take a digital photo for his records + review in 1 month
- E. Advise about sun protection + take a digital photo for his records

This is very likely to be a melanoma and the patient should be fast-tracked to dermatology. Due to the location and the number of moles he has it is unlikely that he would have noticed any change

Malignant melanoma: prognostic factors

The invasion depth of a tumour (Breslow depth) is the single most important factor in determining prognosis of patients with malignant melanoma

Breslow Thickness	Approximate 5 year survival
< 1 mm	95-100%
1 - 2 mm	80-96%

Question stats

A	7.2%
B	85.4%
C	0.9%
D	5.4%
E	1.1%

85.4% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

2.1 - 4 mm	60-75%
> 4 mm	50%

Rate question:

Question 25 of 231



You review a 27-year-old man who is under the care of the dermatology department.



Image used on license from [DermNet NZ](#)



Which one of the following conditions is most associated with this skin disorder?



- A. Addison's disease
- B. Asthma
- C. Iron-deficiency anaemia
- D. Toxic multinodular goitre



- E. Type 2 diabetes mellitus

Question stats

A	<div style="width: 80%;"></div>	80%
B	<div style="width: 1.1%;"></div>	1.1%
C	<div style="width: 2.8%;"></div>	2.8%
D	<div style="width: 5.5%;"></div>	5.5%
E	<div style="width: 10.5%;"></div>	10.5%

80% of users answered this question correctly

Session score = 48%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Vitiligo

Vitiligo is associated with other autoimmune conditions such as Addison's disease, type 1 diabetes mellitus and autoimmune thyroid disorders.

Vitiligo

Vitiligo is an autoimmune condition which results in the loss of melanocytes and consequent depigmentation of the skin. It is thought to affect around 1% of the population and symptoms typically develop by the age of 20-30 years.

Features

- well demarcated patches of depigmented skin
- the peripheries tend to be most affected
- trauma may precipitate new lesions (Koebner phenomenon)

Associated conditions

- type 1 diabetes mellitus
- Addison's disease
- autoimmune thyroid disorders
- pernicious anaemia
- alopecia areata

Management



- sun block for affected areas of skin
- camouflage make-up
- topical corticosteroids may reverse the changes if applied early
- there may also be a role for topical tacrolimus and phototherapy, although caution needs to be exercised with light-skinned patients

Rate question:






Question 26 of 231



A patient with a history of tinea capitis presents due to a raised lesion on his scalp. The lesion has been getting gradually bigger over the past two weeks. On examination you find a raised, pustular, spongy mass on the crown of his head. What is the most likely diagnosis

- A. Tinea corporis
- B. Id reaction (auto-eczematisation)
-  C. **Sebacious cyst**
- D. Bacterial skin abscess
-  E. **Kerion**

Question stats

A		3.6%
B		4.4%
C		12.4%
D		17.3%
E		62.3%

62.3% of users answered this question correctly

Session score = 46.2%

Tinea

Tinea is a term given to dermatophyte fungal infections. Three main types of infection are described depending on what part of the body is infected

- tinea capitis - scalp
- tinea corporis - trunk, legs or arms
- tinea pedis - feet

Tinea capitis (scalp ringworm)

- a cause of scarring alopecia mainly seen in children
- if untreated a raised, pustular, spongy/boggy mass called a kerion may form
- most common cause is *Trichophyton tonsurans* in the UK and the USA
- may also be caused by *Microsporum canis* acquired from cats or dogs
- diagnosis: lesions due to *Microsporum canis* green fluorescence under Wood's lamp*. However the most useful investigation is scalp scrapings
- management (based on CKS guidelines): oral antifungals: terbinafine for *Trichophyton tonsurans* infections and griseofulvin for *Microsporum* infections. Topical ketoconazole shampoo should be given for the first two weeks to reduce transmission

Tinea corporis

- causes include *Trichophyton rubrum* and *Trichophyton verrucosum* (e.g. From contact with cattle)
- well-defined annular, erythematous lesions with pustules and papules
- may be treated with oral fluconazole

Tinea pedis (athlete's foot)

- characterised by itchy, peeling skin between the toes

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Fungal skin infection - scalp

- common in adolescence

*lesions due to Trichophyton species do not readily fluoresce under Wood's lamp

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 27 of 231



A woman burns her arm on the oven door and phones the surgery for advice. She reports a '2 inch by half an inch red line' on her right forearm. The burn is painful but she is otherwise well and has no breathing problems. You book her an appointment for later on in the surgery. What is the most appropriate first aid advice?



- Run under cool (not iced) water for 20 mins + cover in layers of cling film
- Run under cool (not iced) water for 10 mins + apply liberal amounts of E45
- Do nothing until she is seen
- Apply a frozen bag of food (e.g. peas) for 10 mins + cover in layers of cling film
- Apply a bandage that has been soaked in cold water

Question stats

A	<div></div>	79%
B	<div></div>	11.4%
C	<div></div>	2.9%
D	<div></div>	3.2%
E	<div></div>	3.6%

79% of users answered this question correctly

Session score = 48.1%

Burns

The following is based on guidance issued by Clinical Knowledge Summaries (please see the link for more details).

Immediate first aid

- airway, breathing, circulation
- burns caused by heat: remove the person from the source. Within 20 minutes of the injury irrigate the burn with cool (not iced) water for between 10 and 30 minutes. Cover the burn using cling film, layered, rather than wrapped around a limb
- electrical burns: switch off power supply, remove the person from the source
- chemical burns: brush any powder off then irrigate with water. Attempts to neutralise the chemical are not recommended

Assessing the **extent** of the burn

- Wallace's Rule of Nines: head + neck = 9%, each arm = 9%, each anterior part of leg = 9%, each posterior part of leg = 9%, anterior chest = 9%, posterior chest = 9%, anterior abdomen = 9%, posterior abdomen = 9%
- Lund and Browder chart: the most accurate method
- the palmar surface is roughly equivalent to 1% of total body surface area (TBSA). Not accurate for burns > 15% TBSA

Assessing the **depth** of the burn

Modern	Former	Appearance
--------	--------	------------

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Burns and scalds

terminology	terminology	
Superficial epidermal	First degree	Red and painful
Partial thickness (superficial dermal)	Second degree	Pale pink, painful, blistered
Partial thickness (deep dermal)	Second degree	Typically white but may have patches of non-blanching erythema. Reduced sensation
Full thickness	Third degree	White/brown/black in colour, no blisters, no pain

Referral to secondary care

- all deep dermal and full-thickness burns.
- superficial dermal burns of more than 10% TBSA in adults, or more than 5% TBSA in children
- superficial dermal burns involving the face, hands, feet, perineum, genitalia, or any flexure, or circumferential burns of the limbs, torso, or neck
- any inhalation injury
- any electrical or chemical burn injury
- suspicion of non-accidental injury

Management of burns

- initial first aid as above
- review referral criteria to ensure can be managed in primary care
- superficial epidermal: symptomatic relief - analgesia, emollients etc
- superficial dermal: cleanse wound, leave blister intact, non-adherent dressing, avoid topical creams, review in 24 hours

Rate question:

Question 28 of 231


A 31-year-old woman develops painful, purple lesions on her shins. Which one of the following medications is most likely to be responsible?

- A. Montelukast
- B. Lansoprazole
- ✓ C. Combined oral contraceptive pill
- D. Sodium valproate
- ✗ E. Carbimazole

Question stats

A	2.2%
B	1%
C	69.4%
D	13.3%
E	14%

69.4% of users answered this question correctly

Session score = 46.4%

Erythema nodosum
Overview

- inflammation of subcutaneous fat
- typically causes tender, erythematous, nodular lesions
- usually occurs over shins, may also occur elsewhere (e.g. forearms, thighs)
- usually resolves within 6 weeks
- lesions heal without scarring

Causes

- infection: streptococci, TB, brucellosis
- systemic disease: sarcoidosis, inflammatory bowel disease, Behcet's
- malignancy/lymphoma
- drugs: penicillins, sulphonamides, combined oral contraceptive pill
- pregnancy

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema nodosum

Rate question:

Question 29 of 231



You are teaching a mother about the use of topical steroids for her child with atopic eczema. She has heard about the use of Finger Tip Units (FTU) when determining how much steroid to use. What does 1 FTU equate to?



- A. Sufficient to treat a skin area about that of a forearm
- B. Sufficient to treat a skin area about twice that of the flat of an adult hand
- C. Sufficient to treat a skin area about 5 * 5 cm (2 * 2 inches)
- D. Sufficient to treat a skin area about twice that of the forearm
- E. Sufficient to treat a skin area about that of the flat of an adult hand

Finger tip unit (FTU) for steroids = twice area of the flat of an adult hand

Eczema: topical steroids

Use weakest steroid cream which controls patients symptoms

The table below shows topical steroids by potency

Mild	Moderate	Potent	Very potent
Hydrocortisone 0.5-2.5%	Betamethasone valerate 0.025% (Betnovate RD)	Fluticasone propionate 0.05% (Cutivate)	Clobetasol propionate 0.05% (Dermovate)
	Clobetasone butyrate 0.05% (Eumovate)	Betamethasone valerate 0.1% (Betnovate)	

Finger tip rule

- 1 finger tip unit (FTU) = 0.5 g, sufficient to treat a skin area about twice that of the flat of an adult hand

Topical steroid doses for eczema in adults

Area of skin	Fingertip units per dose
Hand and fingers (front and back)	1.0
A foot (all over)	2.0

Question stats

A	4.2%
B	58.2%
C	4.1%
D	0.9%
E	32.6%

58.2% of users answered this question correctly

Session score = 44.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

Atopic eczema guidelines

Front of chest and abdomen	7.0
Back and buttocks	7.0
Face and neck	2.5
An entire arm and hand	4.0
An entire leg and foot	8.0

Rate question:

Question 3 of 231



A 52-year-old man asks you to look at the side of his tongue. The white patches have been present for the past few months and are asymptomatic. He is a smoker who is known to have type 2 diabetes mellitus.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- ☒ A. Candidiasis
- ☐ B. Squamous cell carcinoma
- ☐ C. Lichen sclerosis
- ☒ D. Oral leukoplakia
- ☐ E. Geographic tongue

The asymptomatic and prolonged nature of the symptoms goes against a diagnosis of candidiasis. Lichen planus (rather than sclerosis) is a differential diagnosis but tends to have a slightly different appearance - typically a symmetrical white lace-like pattern on the buccal mucosa. Squamous cell carcinoma is not the most likely diagnosis as only around 1% of oral leukoplakias become malignant.

This patient should be referred for a biopsy to confirm the diagnosis.

Leukoplakia

Leukoplakia is a premalignant condition which presents as white, hard spots on the mucous membranes of the mouth. It is more common in smokers.

Question stats

A	11%
B	3.5%
C	10.2%
D	73.2%
E	2.2%

73.2% of users answered this question correctly

Session score = 66.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Oral leukoplakia

Leukoplakia is said to be a diagnosis of exclusion. Candidiasis and lichen planus should be considered, especially if the lesions can be 'rubbed off'

Biopsies are usually performed to exclude alternative diagnoses such as squamous cell carcinoma and regular follow-up is required to exclude malignant transformation to squamous cell carcinoma, which occurs in around 1% of patients.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 30 of 231



A 60-year-old man presents with a painful lesion on his right ear:



Image used on license from [DermNet NZ](#)



What is the most likely diagnosis?

- ☒ A. Actinic keratosis
- ☐ B. Pseudocyst of the auricle
- ☒ C. Chondrodermatitis nodularis helicis
- ☐ D. Basal cell carcinoma
- ☐ E. Keratoacanthoma

Question stats

A	5.2%
B	4.3%
C	57.4%
D	24.5%
E	8.6%

57.4% of users answered this question correctly

Session score = 43.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Chondrodermatitis nodularis helicis

Chondrodermatitis nodularis helicis (CNH) is a common and benign condition characterised by the development of a painful nodule on the ear. It is thought to be caused by factors such as persistent pressure on the ear (e.g. secondary to sleep, headsets), trauma or cold. CNH is more common in men and with increasing age.

Management

- reducing pressure on the ear: foam 'ear protectors' may be used during sleep
- other treatment options include cryotherapy, steroid injection, collagen

injection

- surgical treatment may be used but there is a high recurrence rate

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 31 of 231



A 2-year-old girl develops a rash on her legs. By the time she is brought to surgery the rash has spread to the rest of her body.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?



- A. Erythema multiforme
- B. Erythema chronica migrans
- C. Erythema nodosum
- D. Urticaria
- E. Dermatitis artefacta



Question stats

A	<div style="width: 71.6%;"></div>	71.6%
B	<div style="width: 2.2%;"></div>	2.2%
C	<div style="width: 2%;"></div>	2%
D	<div style="width: 23.8%;"></div>	23.8%
E	<div style="width: 0.4%;"></div>	0.4%

71.6% of users answered this question correctly

Session score = 41.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema multiforme

The classic 'target' lesions of erythema multiforme can be seen clearly on this image.

Erythema multiforme

Features

- target lesions
- initially seen on the back of the hands / feet before spreading to the torso
- upper limbs are more commonly affected than the lower limbs
- pruritus is occasionally seen and is usually mild

If symptoms are severe and involve blistering and mucosal involvement the term Stevens-Johnson syndrome is used.

Causes

- viruses: herpes simplex virus (the most common cause), Orf*
- idiopathic
- bacteria: *Mycoplasma*, *Streptococcus*
- drugs: penicillin, sulphonamides, carbamazepine, allopurinol, NSAIDs, oral contraceptive pill, nevirapine
- connective tissue disease e.g. Systemic lupus erythematosus
- sarcoidosis
- malignancy

*Orf is a skin disease of sheep and goats caused by a parapox virus

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 32 of 231



A 17-year-old female presents with multiple comedones, pustules and papules on her face. Which one of the following is least likely to improve her condition?



- A. Topical retinoids
- B. Dietary advice
- C. Sunlight
- D. Oral trimethoprim
- E. Ethinylestradiol with cyproterone acetate

There is no role for dietary modification in patients with acne vulgaris. Ethinylestradiol with cyproterone acetate (Dianette) is useful in some female patients with acne unresponsive to standard treatment. Oral trimethoprim is useful in patients on long-term antibiotics who develop Gram negative folliculitis

Acne vulgaris: management

Acne vulgaris is a common skin disorder which usually occurs in adolescence. It typically affects the face, neck and upper trunk and is characterised by the obstruction of the pilosebaceous follicles with keratin plugs which results in comedones, inflammation and pustules.

Acne may be classified into mild, moderate or severe:

- mild: open and closed comedones with or without sparse inflammatory lesions
- moderate acne: widespread non-inflammatory lesions and numerous papules and pustules
- severe acne: extensive inflammatory lesions, which may include nodules, pitting, and scarring

A simple step-up management scheme often used in the treatment of acne is as follows:

- single topical therapy (topical retinoids, benzyl peroxide)
- topical combination therapy (topical antibiotic, benzoyl peroxide, topical retinoid)
- oral antibiotics: e.g. Oxytetracycline, doxycycline. Improvement may not be seen for 3-4 months. Minocycline is now considered less appropriate due to the possibility of irreversible pigmentation. Gram negative folliculitis may occur as a complication of long-term antibiotic use - high-dose oral trimethoprim is effective if this occurs
- oral isotretinoin: only under specialist supervision

There is no role for dietary modification in patients with acne

Rate question:

Question stats

A	<div></div>	4.3%
B	<div></div>	65.9%
C	<div></div>	10%
D	<div></div>	15.8%
E	<div></div>	4%

65.9% of users answered this question correctly

Session score = 43.8%

RCGP curriculum

15.10 - Skin Problems

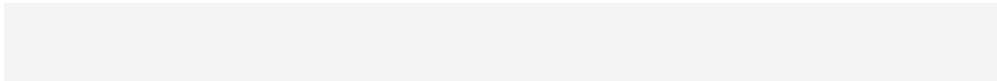
[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Acne vulgaris guidelines



All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 33 of 231


Please look at this skin lesion below a patient's eye:

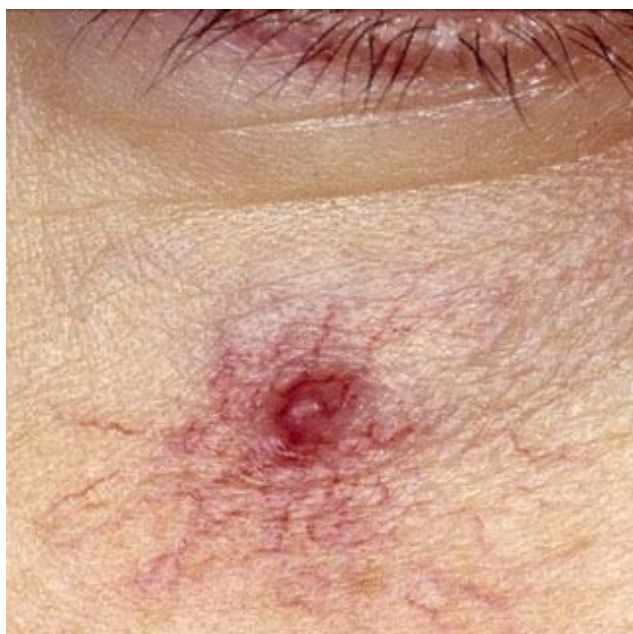


Image used on license from [DermNet NZ](#) and with the kind permission of Prof Raimo Suhonen

Which one of the following medications is most associated with the development of these lesions?

- A. Statins
- B. Prednisolone
- C. Aspirin
- D. Amiodarone
- ✓ E. Combined oral contraceptive pill

Question stats

A	5.5%
B	28.8%
C	6.8%
D	16.3%
E	42.6%

42.6% of users answered this question correctly

Session score = 45.5%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Spider naevi

Spider naevi (also called spider angiomas) describe a central red papule with surrounding capillaries. The lesions blanch upon pressure. Spider naevi are almost always found on the upper part of the body.

Around 10-15% of people will have one or more spider naevi and they are more common in childhood. Other associations

- liver disease
- pregnancy

- combined oral contraceptive pill

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 34 of 231


A 34-year-old man presents for the removal of a mole. Where on the body are keloid scars most likely to form?



- A. Sternum
- B. Lower back
- C. Abdomen
- D. Flexor surfaces of limbs



- E. Scalp

Keloid scars are most common on the sternum

Keloid scars

Keloid scars are tumour-like lesions that arise from the connective tissue of a scar and extend beyond the dimensions of the original wound

Predisposing factors

- ethnicity: more common in people with dark skin
- occur more commonly in young adults, rare in the elderly
- common sites (in order of decreasing frequency): sternum, shoulder, neck, face, extensor surface of limbs, trunk

Keloid scars are less likely if incisions are made along relaxed skin tension lines*

Treatment

- early keloids may be treated with intra-lesional steroids e.g. triamcinolone
- excision is sometimes required

*Langer lines were historically used to determine the optimal incision line. They were based on procedures done on cadavers but have been shown to produce worse cosmetic results than when following skin tension lines

Rate question:

Question stats

A	<div style="width: 76.3%;"></div>	76.3%
B	<div style="width: 4.3%;"></div>	4.3%
C	<div style="width: 6.2%;"></div>	6.2%
D	<div style="width: 9.7%;"></div>	9.7%
E	<div style="width: 3.5%;"></div>	3.5%

76.3% of users answered this question correctly

Session score = 44.1%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 35 of 231



You are examining the chest of a 74-year-old man and notice the following:



Image used on license from DermNet.NZ

What is the most likely diagnosis?



- A. Bowen's disease
- B. Multiple benign moles
- C. Metastatic malignant melanoma
- D. Seborrheic keratoses
- E. Dysplastic naevus syndrome



Question stats

A	4.3%
B	7%
C	1.6%
D	79.5%
E	7.5%

79.5% of users answered this question correctly

Session score = 42.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

DermNet.NZ

Seborrheic keratoses

This man has multiple seborrheic keratoses, also known as basal cell papillomas.

Seborrheic keratoses

Seborrheic keratoses are benign epidermal skin lesions seen in older people.

Features

- large variation in colour from flesh to light-brown to black
- have a 'stuck-on' appearance
- keratotic plugs may be seen on the surface

Management

- reassurance about the benign nature of the lesion is an option

- options for removal include curettage, cryosurgery and shave biopsy

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 36 of 231



A 53-year-old man presents complaining of an itchy scalp and dandruff. On examination he is noted to have eczema on his scalp, behind his ears and around his nose.



Image used on license from [DermNet NZ](#)



He has tried 'Head and Shoulders' and 'Neutrogen T-gel' but with poor results. Which one of the following is the most appropriate treatment for his scalp?



A. Topical hydrocortisone

B. Topical dermivate

C. Topical selenium sulphide

D. Oral terbinafine



E. Topical ketoconazole

Question stats

A	8.1%
B	4.8%
C	21%
D	3.9%
E	62.3%

62.3% of users answered this question correctly

Session score = 41.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Overview and pictures of seborrhoeic dermatitis

[Clinical Knowledge Summaries](#)

Seborrhoeic dermatitis guidelines

Seborrhoeic dermatitis in adults

Seborrhoeic dermatitis in adults is a chronic dermatitis thought to be caused by an inflammatory reaction related to a proliferation of a normal skin inhabitant, a fungus called *Malassezia furfur* (formerly known as *Pityrosporum ovale*). It is common, affecting around 2% of the general population

Features

- eczematous lesions on the sebum-rich areas: scalp (may cause dandruff),

- periorbital, auricular and nasolabial folds
- otitis externa and blepharitis may develop

Associated conditions include

- HIV
- Parkinson's disease

Scalp disease management

- over the counter preparations containing zinc pyrithione ('Head & Shoulders') and tar ('Neutrogena T/Gel') are first-line
- the preferred second-line agent is ketoconazole
- selenium sulphide and topical corticosteroid may also be useful

Face and body management

- topical antifungals: e.g. Ketoconazole
- topical steroids: best used for short periods
- difficult to treat - recurrences are common

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 37 of 231



A 34-year-old man presents to his GP with an itchy rash on his genitals and palms. He has also noticed the rash around the site of a recent scar on his forearm. Examination reveals papules with a white-lace pattern on the surface. What is the diagnosis?



- A. Lichen planus
- B. Scabies
- C. Lichen sclerosus
- D. Morphea
- E. Pityriasis rosea

Question stats

A	<div style="width: 69%;"></div>	69%
B	<div style="width: 7.4%;"></div>	7.4%
C	<div style="width: 17.1%;"></div>	17.1%
D	<div style="width: 4.2%;"></div>	4.2%
E	<div style="width: 2.3%;"></div>	2.3%

69% of users answered this question correctly

Session score = 43.2%

Lichen

- planus: purple, pruritic, papular, polygonal rash on flexor surfaces. Wickham's striae over surface. Oral involvement common
- sclerosus: itchy white spots typically seen on the vulva of elderly women

This is a typical history of lichen planus

Lichen planus

Lichen planus is a skin disorder of unknown aetiology, most probably being immune mediated

Features

- itchy, papular rash most common on the palms, soles, genitalia and flexor surfaces of arms
- rash often polygonal in shape, 'white-lace' pattern on the surface (Wickham's striae)
- Koebner phenomenon may be seen (new skin lesions appearing at the site of trauma)
- oral involvement in around 50% of patients
- nails: thinning of nail plate, longitudinal ridging

Lichenoid drug eruptions - causes:

- gold
- quinine
- thiazides

Management

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of lichen planus

[DermNet NZ](#)

Picture of Wickham's striae

- topical steroids are the mainstay of treatment
- extensive lichen planus may require oral steroids or immunosuppression

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 38 of 231


A 54-year-old man presents with a two month history of a rapidly growing lesion on his right forearm. The lesion initially appeared as a red papule but in the last two weeks has become a crater filled centrally with yellow/brown material. On examination the man has skin type II, the lesion is 4 mm in diameter and is morphologically as described above. What is the most likely diagnosis?

- A. Seborrhoeic keratosis
- B. Keratoacanthoma
- C. Pyoderma gangrenosum
- D. Basal cell carcinoma
- E. Malignant melanoma


Question stats

A	3.2%
B	60.1%
C	21.1%
D	10.6%
E	4.9%

60.1% of users answered this question correctly

Session score = 42.1%

Keratoacanthoma

Keratoacanthoma is a benign epithelial tumour. They are more frequent in middle age and do not become more common in old age (unlike basal cell and squamous cell carcinoma)

Features - said to look like a volcano or crater

- initially a smooth dome-shaped papule
- rapidly grows to become a crater centrally-filled with keratin

Spontaneous regression of keratoacanthoma within 3 months is common, often resulting in a scar. Such lesions should however be urgently excised as it is difficult clinically to exclude squamous cell carcinoma. Removal also may prevent scarring

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Keratoacanthoma pictures

Rate question:

Question 39 of 231





You review an 82-year-old woman who has developed 'sores' on her legs. For the past two years she has had dry, itchy skin around her ankles but over the past few weeks the skin has started to break down.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Necrobiosis lipoidica diabetorum
- B. Pyoderma gangrenosum
-  C. Arterial ulcers
-  D. Venous ulcers
- E. Pretibial myxoedema

The dry, skin represents varicose eczema. Arterial ulcers tend to have a more 'punched-out' appearance.

Venous ulceration

Question stats

A	8.8%
B	8%
C	14.3%
D	65.4%
E	3.4%

65.4% of users answered this question correctly

Session score = 41%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[BMJ](#)

Management of venous leg ulcers

Venous ulceration is typically seen above the medial malleolus

Investigations

- ankle-brachial pressure index (ABPI) is important in non-healing ulcers to assess for poor arterial flow which could impair healing
- a 'normal' ABPI may be regarded as between 0.9 - 1.2. Values below 0.9 indicate arterial disease. Interestingly, values above 1.3 may also indicate arterial disease, in the form of false-negative results secondary to arterial calcification (e.g. In diabetics)

Management

- compression bandaging, usually four layer (only treatment shown to be of real benefit)
- oral pentoxifylline, a peripheral vasodilator, improves healing rate
- small evidence base supporting use of flavinoids
- little evidence to suggest benefit from hydrocolloid dressings, topical growth factors, ultrasound therapy and intermittent pneumatic compression

Rate question:

Question 4 of 231

A 54-year-old man with a history of type 2 diabetes mellitus and benign prostatic hyperplasia is referred to dermatology due to a number of lesions over his shin. On examination symmetrical, erythematous, tender, nodules are found. The lesions have started to heal without scarring. What is the most likely diagnosis?



- A. Necrobiosis lipoidica diabetorum
- B. Erythema nodosum
- C. Pyoderma gangrenosum
- D. Syphilis
- E. Pretibial myxoedema

The diagnosis in this question needs to be made on the description of the lesions as the past medical history is not relevant.

Shin lesions

The differential diagnosis of shin lesions includes the following conditions:

- erythema nodosum
- pretibial myxoedema
- pyoderma gangrenosum
- necrobiosis lipoidica diabetorum

Below are the characteristic features:

Erythema nodosum

- symmetrical, erythematous, tender, nodules which heal without scarring
- most common causes are streptococcal infections, sarcoidosis, inflammatory bowel disease and drugs (penicillins, sulphonamides, oral contraceptive pill)

Pretibial myxoedema

- symmetrical, erythematous lesions seen in Graves' disease
- shiny, orange peel skin

Pyoderma gangrenosum

- initially small red papule
- later deep, red, necrotic ulcers with a violaceous border
- idiopathic in 50%, may also be seen in inflammatory bowel disease, connective tissue disorders and myeloproliferative disorders

Necrobiosis lipoidica diabetorum

Question stats

A		20.7%
B		73.7%
C		3.6%
D		0.1%
E		1.9%

73.7% of users answered this question correctly

Session score = 75%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of erythema nodosum

[DermIS.net](#)

Picture of pretibial myxoedema

[DermNet NZ](#)

Picture of pyoderma gangrenosum

[DermNet NZ](#)

Picture of necrobiosis lipoidica

- shiny, painless areas of yellow/red skin typically on the shin of diabetics
- often associated with telangiectasia



Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)






Question 40 of 231



A 26-year-old newly qualified nurse presents as she has developed a bilateral erythematous rash on both hands. She has recently emigrated from the Philippines and has no past medical history of note. A diagnosis of contact dermatitis is suspected. What is the most suitable to test to identify the underlying cause?

- A. Radioallergosorbent test (RAST)
- B. Latex IgM levels
-  C. Skin prick test
- D. Urinary porphyrins
-  E. Skin patch test

Question stats

A		11.4%
B		9.2%
C		11.6%
D		0.2%
E		67.6%

67.6% of users answered this question correctly

Session score = 40%

The skin patch test is useful in this situation as it may also identify for irritants, not just allergens

Allergy tests

Skin prick test	<p>Most commonly used test as easy to perform and inexpensive. Drops of diluted allergen are placed on the skin after which the skin is pierced using a needle. A large number of allergens can be tested in one session. Normally includes a histamine (positive) and sterile water (negative) control. A wheal will typically develop if a patient has an allergy. Can be interpreted after 15 minutes</p> <p>Useful for food allergies and also pollen</p>
Radioallergosorbent test (RAST)	<p>Determines the amount of IgE that reacts specifically with suspected or known allergens, for example IgE to egg protein. Results are given in grades from 0 (negative) to 6 (strongly positive)</p> <p>Useful for food allergies, inhaled allergens (e.g. Pollen) and wasp/bee venom</p> <p>Blood tests may be used when skin prick tests are not suitable, for example if there is extensive eczema or if the patient is taking antihistamines</p>
Skin patch testing	<p>Useful for contact dermatitis. Around 30-40 allergens are placed on the back. Irritants may also be tested for. The patches are removed 48 hours later with the results being read by a dermatologist after a further 48 hours</p>

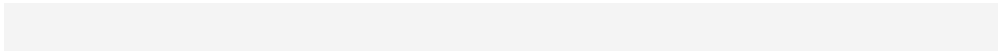
RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:



All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 41 of 231



Please look at the skin lesion shown below:



Image used on license from [DermNet NZ](#)

Question stats

A	<div style="width: 50.8%;"></div>	50.8%
B	<div style="width: 8.7%;"></div>	8.7%
C	<div style="width: 10.8%;"></div>	10.8%
D	<div style="width: 17.3%;"></div>	17.3%
E	<div style="width: 12.5%;"></div>	12.5%

50.8% of users answered this question correctly

Session score = 41.5%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Basal cell carcinoma

Which one of the following statements regarding this type of skin lesion is true?



- A. **Curettage is an acceptable treatment option**
- B. They exhibit the Koebner phenomenon
- C. They typically grow rapidly
- D. Bleeding is unusual
- E. Metastases are present in 10% of patients at the time of diagnosis

Basal cell carcinoma

Basal cell carcinoma (BCC) is one of the three main types of skin cancer. Lesions are also known as rodent ulcers and are characterised by slow-growth and local invasion. Metastases are extremely rare. BCC is the most common type of cancer in the Western world.

Features

- many types of BCC are described. The most common type is nodular BCC, which is described here
- sun-exposed sites, especially the head and neck account for the majority of lesions
- initially a pearly, flesh-coloured papule with telangiectasia
- may later ulcerate leaving a central 'crater'

Management options:

- surgical removal
- curettage
- cryotherapy
- topical cream: imiquimod, fluorouracil
- radiotherapy

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 42 of 231


A 23-year-old man presents with a three day history of general malaise and low-grade temperature. Yesterday he developed extensive painful ulceration of his mouth and gums. On examination his temperature is 37.4°C, pulse 84 / min and there is submandibular lymphadenopathy. What is the most likely diagnosis?

- A. Epstein Barr virus
- B. Lichen planus
- C. HIV seroconversion illness
- ✓ D. Herpes simplex virus infection
- E. Oral *Candida*

This man has gingivostomatitis, a characteristic feature of primary herpes simplex virus infection

Herpes simplex virus

There are two strains of the herpes simplex virus (HSV) in humans: HSV-1 and HSV-2. Whilst it was previously thought HSV-1 accounted for oral lesions (cold sores) and HSV-2 for genital herpes it is now known there is considerable overlap

Features

- primary infection: may present with a severe gingivostomatitis
- cold sores
- painful genital ulceration

Management

- gingivostomatitis: oral aciclovir, chlorhexidine mouthwash
- cold sores: topical aciclovir although the evidence base for this is modest
- genital herpes: oral aciclovir. Some patients with frequent exacerbations may benefit from longer term aciclovir

Rate question:
Question stats

A		23%
B		1.7%
C		18.4%
D		56%
E		0.9%

56% of users answered this question correctly

Session score = 42.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 43 of 231



A 34-year-old man with a history of polyarthralgia, back pain and diarrhoea is found to have a 3 cm red lesion on his shin which is starting to ulcerate. What is the most likely diagnosis?

- A. Systemic *Shigella* infection
- B. Syphilis
- C. Metastatic colon cancer
- D. Erythema nodosum
- E. **Pyoderma gangrenosum**



This patient is likely to have ulcerative colitis, which has a known association with large-joint arthritis, sacroiliitis and pyoderma gangrenosum

Pyoderma gangrenosum

Features

- typically on the lower limbs
- initially small red papule
- later deep, red, necrotic ulcers with a violaceous border
- may be accompanied systemic symptoms e.g. Fever, myalgia

Causes*

- idiopathic in 50%
- inflammatory bowel disease: ulcerative colitis, Crohn's
- rheumatoid arthritis, SLE
- myeloproliferative disorders
- lymphoma, myeloid leukaemias
- monoclonal gammopathy (IgA)
- primary biliary cirrhosis

Management

- the potential for rapid progression is high in most patients and most doctors advocate oral steroids as first-line treatment
- other immunosuppressive therapy, for example ciclosporin and infliximab, have a role in difficult cases

*note whilst pyoderma gangrenosum can occur in diabetes mellitus it is rare and is generally not included in a differential of potential causes

Rate question:

Question stats

A	4%
B	2.8%
C	0.4%
D	18.7%
E	74.1%

74.1% of users answered this question correctly

Session score = 44.2%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of pyoderma gangrenosum

[DermNet NZ](#)

Stoma skin problems

Questions 44 to 46 of 231



Theme: Causes of pruritus

- A** Liver disease
- B** Hypothyroidism
- C** Diabetes mellitus
- D** Pregnancy
- E** Chronic kidney disease
- F** Polycythaemia
- G** Iron deficiency anaemia
- H** Senile pruritus
- I** Scabies
- J** Lymphoma

Question stats

Average score for registered users:

44	<div style="width: 91%;"></div>	91%
45	<div style="width: 42.5%;"></div>	42.5%
46	<div style="width: 88.1%;"></div>	88.1%

Session score = 47.8%

For each of the following scenarios select the most likely diagnosis:

- 44.** A 52-year-old woman presents with pruritus and lethargy. She has recently put on weight and is complaining about dry skin



Hypothyroidism

- 45.** A 57-year-old woman presents with pruritus. She states she has been gaining weight despite eating less and complains of constant nausea. On examination she is pale



Chronic kidney disease

Pregnancy is highly unlikely given her age.

- 46.** A 59-year-old man complains of pruritus and lethargy. On examination he has spoon shaped nails and a smooth tongue



Iron deficiency anaemia

Pruritus

The table below lists the main characteristics of the most important causes of pruritus

Liver disease	History of alcohol excess Stigmata of chronic liver disease: spider naevi, bruising, palmar erythema, gynaecomastia etc Evidence of decompensation: ascites, jaundice, encephalopathy
Iron deficiency anaemia	Pallor Other signs: koilonychia, atrophic glossitis, post-cricoid webs, angular stomatitis
Polycythaemia	Pruritus particularly after warm bath 'Ruddy complexion' Gout Peptic ulcer disease
Chronic kidney disease	Lethargy & pallor Oedema & weight gain Hypertension
Lymphoma	Night sweats Lymphadenopathy Splenomegaly, hepatomegaly Fatigue

Other causes:

- hyper- and hypothyroidism
- diabetes
- pregnancy
- 'senile' pruritus
- urticaria
- skin disorders: eczema, scabies, psoriasis, pityriasis rosea

Rate question:

Question 47 of 231





A 67-year-old man who is a retired builder presents following the development of a number of red, scaly lesions on his forehead. These were initially small and flat but are now erythematous and rough to touch.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Pityriasis versicolor
- B. Seborrhoeic keratosis
-  C. Polymorphous light eruption
-  D. Actinic keratoses
- E. Malignant melanoma

Question stats

A	2.5%
B	17.9%
C	3.7%
D	75.2%
E	0.6%

75.2% of users answered this question correctly

Session score = 46.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

2007 Actinic keratoses guidelines

[DermNet NZ](#)

Actinic keratoses

Actinic keratoses

Actinic, or solar, keratoses (AK) is a common premalignant skin lesion that develops as a consequence of chronic sun exposure

Features

- small, crusty or scaly, lesions
- may be pink, red, brown or the same colour as the skin
- typically on sun-exposed areas e.g. temples of head
- multiple lesions may be present

Management options include

- prevention of further risk: e.g. sun avoidance, sun cream
- fluorouracil cream: typically a 2 to 3 week course. The skin will become red and inflamed - sometimes topical hydrocortisone is given following fluorouracil to help settle the inflammation
- topical diclofenac: may be used for mild AKs. Moderate efficacy but much fewer side-effects
- topical imiquimod: trials have shown good efficacy
- cryotherapy
- curettage and cautery

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 48 of 231



A 85-year-old lady presents to her GP complaining of itchy white plaques affecting her vulva. There is no history of vaginal discharge or bleeding. A similar plaque is also seen on her inner thigh. What is the likely diagnosis?

- A. *Candida*
- B. Lichen planus
- C. Lichen sclerosus
- D. Herpes simplex
- E. Seborrhoeic dermatitis



Question stats

A	5.3%
B	21.6%
C	72%
D	0.5%
E	0.6%

72% of users answered this question correctly

Session score = 45.8%

Lichen

- planus: purple, pruritic, papular, polygonal rash on flexor surfaces. Wickham's striae over surface. Oral involvement common
- sclerosus: itchy white spots typically seen on the vulva of elderly women

The correct answer is lichen sclerosus. *Candida* may cause pruritus and white plaques but lesions would not also be seen on her inner thigh

Lichen sclerosus

Lichen sclerosus was previously termed lichen sclerosus et atrophicus. It is an inflammatory condition which usually affects the genitalia and is more common in elderly females. Lichen sclerosus leads to atrophy of the epidermis with white plaques forming

Features

- itch is prominent

A biopsy is often performed to exclude other diagnoses

Management

- topical steroids and emollients
- increased risk of vulval cancer

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Lichen sclerosus

Question 49 of 231



A 34-year-old man presents with unsightly toes:



What is the most likely causative organism?



- A. *Microsporum gypseum*
- B. *Trichophyton interdigitale*
- C. *Candida*
- D. Non-dermatophytic moulds
- E. *Trichophyton rubrum*



Question stats

A	9.4%
B	15.3%
C	6.9%
D	4.3%
E	64.2%

64.2% of users answered this question correctly

Session score = 44.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Fungal nail infections

Fungal nail infections

Onychomycosis is fungal infection of the nails. This may be caused by

- dermatophytes - mainly *Trichophyton rubrum*, accounts for 90% of cases
- yeasts - such as *Candida*
- non-dermatophyte moulds

Features

- 'unsightly' nails are a common reason for presentation
- thickened, rough, opaque nails are the most common finding

Investigation

- nail clippings

scrapings of the affected nail

Management

- treatment is successful in around 50-80% of people
- diagnosis should be confirmed by microbiology before starting treatment
- dermatophyte infection: oral terbinafine is currently recommended first-line with oral itraconazole as an alternative. Six weeks - 3 months therapy is needed for fingernail infections whilst toenails should be treated for 3 - 6 months
- *Candida* infection: mild disease should be treated with topical antifungals (e.g. Amorolfine) whilst more severe infections should be treated with oral itraconazole for a period of 12 weeks

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 50 of 231


Which one of the following best describes the typical distribution of atopic eczema in a 10-month-old child?



- A. Nappy area and flexor surfaces of arms and legs
- B. **Face and trunk**
- C. Nappy area and trunk
- D. Flexor surfaces of arms and legs
- E. Scalp and arms

Question stats

A		21.7%
B		50.2%
C		5.6%
D		18.5%
E		3.9%

50.2% of users answered this question correctly

Session score = 46%

Eczema in children

Eczema occurs in around 15-20% of children and is becoming more common. It typically presents before 6 months but clears in around 50% of children by 5 years of age and in 75% of children by 10 years of age

Features

- in infants the face and trunk are often affected
- in younger children eczema often occurs on the extensor surfaces
- in older children a more typical distribution is seen, with flexor surfaces affected and the creases of the face and neck

Management

- avoid irritants
- simple emollients: large quantities should be prescribed (e.g. 250g / week), roughly in a ratio of with topical steroids of 10:1. If emollients are used in conjunction with a topical steroid they should be applied around 30 minutes after the steroid
- topical steroids
- in severe cases wet wraps and oral ciclosporin may be used

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

Atopic eczema guidelines

Rate question:

Question 1 of 181


A 62-year-old patient with type 2 diabetes mellitus presents with a 'rash' on his left shin. This has grown in size over the past two days and is now a painful, hot, erythematous area on his anterior left shin spreading around to the back of the leg. He is systemically well and a decision is made to give oral treatment. He has a past history of penicillin allergy. What is the most appropriate antibiotic to give?

- A. Ciprofloxacin
- B. Cefaclor
- C. Clindamycin
- D. Vancomycin
- E. Erythromycin


Question stats

A		5.5%
B		1.2%
C		20.4%
D		1%
E		71.9%

71.9% of users answered this question correctly

Session score = 100%

Cellulitis: management

The BNF recommends flucloxacillin as first-line treatment for mild/moderate cellulitis. Erythromycin is recommended in patients allergic to penicillin. Treatment failure is now commonly treated with oral clindamycin.

Rate question:
RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 5 of 231



A 22-year-old woman presents due to hypopigmented skin lesions on her chest and back. She has recently returned from holiday in Spain and has tanned skin. On examination the lesions are slightly scaly. What is the most likely diagnosis?

- A. Tinea corporis
- ✓ B. Pityriasis versicolor
- C. Porphyria cutanea tarda
- D. Lyme disease
- ✗ E. Psoriasis

Question stats

A		9.2%
B		81.3%
C		4.7%
D		1.2%
E		3.5%

81.3% of users answered this question correctly

Session score = 60%

Pityriasis versicolor

Pityriasis versicolor, also called tinea versicolor, is a superficial cutaneous fungal infection caused by *Malassezia furfur* (formerly termed *Pityrosporum ovale*)

Features

- most commonly affects trunk
- patches may be hypopigmented, pink or brown (hence versicolor)
- scale is common
- mild pruritus

Predisposing factors

- occurs in healthy individuals
- immunosuppression
- malnutrition
- Cushing's

Management

- topical antifungal e.g. terbinafine or selenium sulphide
- if extensive disease or failure to respond to topical treatment then consider oral itraconazole

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of pityriasis versicolor 1

[DermNet NZ](#)

Picture of pityriasis versicolor 2

[DermNet NZ](#)

Hypopigmentation post pityriasis versicolor

Question 2 of 181

A 30-year-old female in her third trimester of pregnancy mentions during an antenatal appointment that she has noticed an itchy rash around her umbilicus. This is her second pregnancy and she had no similar problems in her first pregnancy. Examination reveals blistering lesions in the peri-umbilical region and on her arms. What is the likely diagnosis?

- A. Seborrhoeic dermatitis
- B. Pompholyx
- C. Polymorphic eruption of pregnancy
- D. Lichen planus
- E. Pemphigoid gestationis



Polymorphic eruption of pregnancy is not associated with blistering

Pemphigoid gestationis is the correct answer. Polymorphic eruption of pregnancy is not associated with blistering

Skin disorders associated with pregnancy

Polymorphic eruption of pregnancy

- pruritic condition associated with last trimester
- lesions often first appear in abdominal striae
- management depends on severity: emollients, mild potency topical steroids and oral steroids may be used

Pemphigoid gestationis

- pruritic blistering lesions
- often develop in peri-umbilical region, later spreading to the trunk, back, buttocks and arms
- usually presents 2nd or 3rd trimester and is rarely seen in the first pregnancy
- oral corticosteroids are usually required

Rate question:

Question stats

A	0.9%
B	3%
C	31.3%
D	0.5%
E	64.2%

64.2% of users answered this question correctly

Session score = 100%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Polymorphic eruption of pregnancy

[DermNet NZ](#)

Pemphigoid gestationis

Question 3 of 181

A 59-year-old man complains of dry, sore eyes for the past six months. There has been no change in his vision and he doesn't wear contact lens. The only past history of note is hypothyroidism.

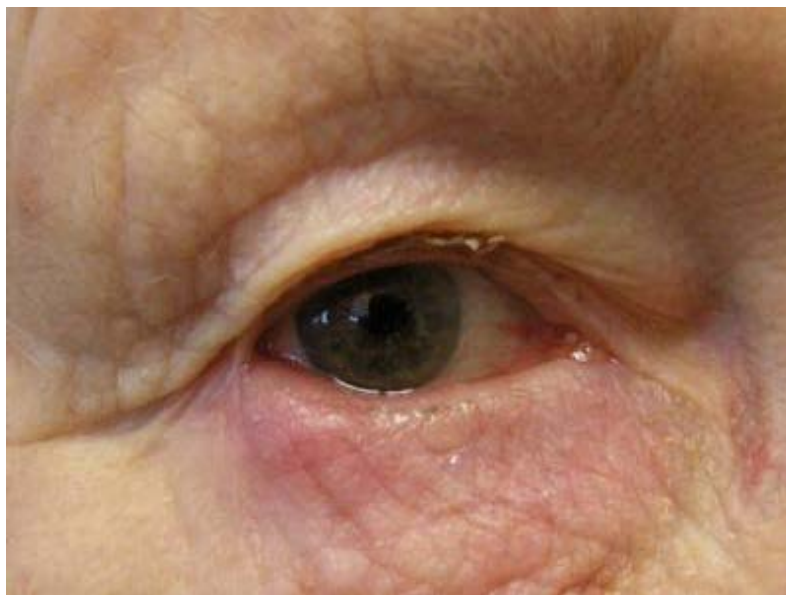


Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- ☒ A. Blepharitis
- ☐ B. Grave's eye disease
- ☐ C. Episcleritis
- ☐ D. Conjunctivitis
- ☐ E. Hay fever

Question stats

A	<div style="width: 84.9%;"></div>	84.9%
B	<div style="width: 5.3%;"></div>	5.3%
C	<div style="width: 7.7%;"></div>	7.7%
D	<div style="width: 1.1%;"></div>	1.1%
E	<div style="width: 1%;"></div>	1%

84.9% of users answered this question correctly

Session score = 100%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Blepharitis guidelines

Blepharitis

Blepharitis is inflammation of the eyelid margins. It may be due to either meibomian gland dysfunction (common, posterior blepharitis) or seborrhoeic dermatitis/staphylococcal infection (less common, anterior blepharitis). Blepharitis is also more common in patients with rosacea.

The meibomian glands secrete oil on to the eye surface to prevent rapid evaporation of the tear film. Any problem affecting the meibomian glands (as in blepharitis) can hence cause drying of the eyes which in turn leads to irritation.

Features

- symptoms are usually bilateral
- grittiness and discomfort, particularly around the eyelid margins
- eyes may be sticky in the morning
- eyelid margins may be red. Swollen eyelids may be seen in staphylococcal blepharitis
- styes and chalazions are more common in patients with blepharitis
- secondary conjunctivitis may occur

Management

- softening of the lid margin using hot compresses twice a day
- mechanical removal of the debris from lid margins - cotton wool buds dipped in a mixture of cooled boiled water and baby shampoo is often used*
- artificial tears may be given for symptom relief in people with dry eyes or an abnormal tear film

*an alternative is sodium bicarbonate, a teaspoonful in a cup of cooled water that has recently been boiled

Rate question:

Question 4 of 181


A 18-year-old man complains of an itchy sensation around his toes;



What is the most appropriate first line treatment?

- ✓
- A. Topical nystatin
 - B. **Topical miconazole**
 - C. Topical amorolfine
 - D. Topical steroid
 - E. Antiperspirant dusting powders

Question stats

A	7.7%
B	80.2%
C	8.4%
D	0.5%
E	3.2%

80.2% of users answered this question correctly

Session score = 75%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Athlete's foot guidelines

Athlete's foot

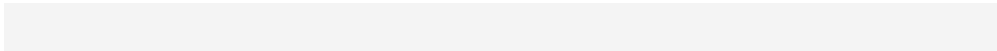
Athlete's foot is also known as tinea pedis. It is usually caused by fungi in the genus Trichophyton.

Features

- typically scaling, flaking, and itching between the toes

Clinical knowledge summaries recommend a topical imidazole, undecenoate, or terbinafine first-line

Rate question:



Question 5 of 181





A 56-year-old woman develops a rash in both axilla:



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Pellagra
- B. Erythema gyratum repens
- C. Hidradenitis suppurativa
-  D. Tinea corporis
-  E. Acanthosis nigricans

This image shows the typical brown, velvety patches which affect the axilla, neck and groin.

Acanthosis nigricans

Describes symmetrical, brown, velvety plaques that are often found on the neck, axilla and groin

Causes

- gastrointestinal cancer
- insulin-resistant diabetes mellitus
- obesity
- polycystic ovarian syndrome
- acromegaly

Question stats

A	2.1%
B	1.3%
C	8.1%
D	5.2%
E	83.2%

83.2% of users answered this question correctly

Session score = 60%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Acanthosis nigricans

- Cushing's disease
- hypothyroidism
- familial
- Prader-Willi syndrome
- drugs: oral contraceptive pill, nicotinic acid

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 6 of 181



A 54-year-old man is referred by his GP to the dermatology outpatient department due to a facial rash which has persisted for the past 12 months. On examination there is a symmetrical rash consisting of extensive pustules and papules which affects his nose, cheeks and forehead. What is the most appropriate treatment?



- A. Ciprofloxacin
- B. Isotretinoin
- C. Oxytetracycline
- D. Hydroxychloroquine
- E. Prednisolone

Question stats

A	1.9%
B	10.3%
C	81.2%
D	2.2%
E	4.4%

81.2% of users answered this question correctly

Session score = 50%

As there is extensive involvement oral oxytetracycline should probably be used rather than topical metronidazole

Acne rosacea

Acne rosacea is a chronic skin disease of unknown aetiology

Features

- typically affects nose, cheeks and forehead
- flushing is often first symptom
- telangiectasia are common
- later develops into persistent erythema with papules and pustules
- rhinophyma
- ocular involvement: blepharitis

Management

- topical metronidazole may be used for mild symptoms (i.e. Limited number of papules and pustules, no plaques)
- more severe disease is treated with systemic antibiotics e.g. Oxytetracycline
- recommend daily application of a high-factor sunscreen
- camouflage creams may help conceal redness
- laser therapy may be appropriate for patients with prominent telangiectasia

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Rosacea guidelines

Question 7 of 181



A 27-year-old man with a history of depression and coeliac disease presents with an itchy rash on his buttocks:



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Linear IgA dermatosis
- B. Neurotic excoriations
- C. Scabies
- ☒ D. **Dermatitis herpetiformis**
- ☐ E. **SSRI-associated dermatitis**



Question stats

A	4%
B	4.5%
C	8.2%
D	78.7%
E	4.5%

78.7% of users answered this question correctly

Session score = 42.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Dermatitis herpetiformis

Dermatitis herpetiformis

Dermatitis herpetiformis is an autoimmune blistering skin disorder associated with coeliac disease. It is caused by deposition of IgA in the dermis.

Features

- itchy, vesicular skin lesions on the extensor surfaces (e.g. elbows, knees buttocks)

Diagnosis

- skin biopsy: direct immunofluorescence shows deposition of IgA in a granular pattern in the upper dermis

Management

- gluten-free diet
- dapsone

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Immunological disorders](#)

Dermatitis herpetiformis

Dermatitis herpetiformis (also known as 'DH') is a rare but persistent immunobullous skin condition related to coeliac disease. It affects young adults; two thirds of patients are male. There is a genetic predisposition.

'Immunobullous' means it is a blistering condition caused by an abnormal immunological reaction. All forms of coeliac disease involve IgA antibodies and intolerance to the gliadin fraction of gluten found in wheat; the precise reaction has not been identified.

Eighty percent of patients with dermatitis herpetiformis also have gluten enteropathy, which is the most common type of coeliac disease. There is an association with thyroid disease in one third.

Clinical features

Dermatitis herpetiformis characteristically affects the scalp, buttocks, elbows and knees but lesions may arise on any area of skin. Extremely itchy bumps ([prurigo](#) papules) and blisters (vesicles) up to 1 cm in diameter arise on normal or reddened skin. The severity can vary from week to week but it rarely clears up without specific treatment.

Dermatitis herpetiformis





Gluten enteropathy

Gluten enteropathy may affect children and adults. It is characterised by villous atrophy. This means that instead of being highly convoluted, the lining of the intestines is smooth and flattened. The result is poor or very poor absorption of nutrients. The patient may feel well or develop the following symptoms:

- Tiredness (80%)
- Abdominal discomfort and bloating (75%)
- Weight loss (30%)
- Constipation (30%) or diarrhoea (50%)
- Pale stools that float on the surface of the toilet pan
- Bone fractures due to osteoporosis

Other associated conditions

The range of conditions less commonly induced by gluten also includes:

- Neurological problems including ataxia (loss of balance), polyneuropathy, epilepsy
- Heart problems including pericarditis and cardiomyopathy
- Thin dental enamel
- Recurrent abortions (miscarriage)
- Fatty liver resulting in abnormal liver function
- Aphthous ulcers

Patients with coeliac disease sometimes suffer from other autoimmune conditions possibly associated with gluten intolerance. These include insulin-dependent diabetes mellitus, thyroiditis, autoimmune hepatitis, Sjögren's syndrome, [Addison's disease](#), atrophic gastritis and [alopecia areata](#).

They may also be affected by conditions that are not related to gluten intolerance. These include IgA deficiency, [psoriasis](#), [Down syndrome](#) and primary biliary cirrhosis.

Non-Hodgkin's lymphoma, affecting the intestines or any part of the body, is a serious complication of gluten enteropathy but is fortunately rare, affecting less than 1% of patients.

Laboratory findings

Although dermatologists may suspect the diagnosis from the clinical appearance, a [skin biopsy](#) is usually necessary to confirm it. The microscopic appearance of dermatitis herpetiformis is characteristic.

- The blister is subepidermal (it forms underneath the epidermis)
- The inflammatory cells (neutrophils and eosinophils) group in the dermal papillae
- Direct immunofluorescence reveals IgA immunoglobulin in dermal papillae

The results of blood tests are usually normal but some patients have the following abnormalities, due to gluten enteropathy:

- Mild anaemia
- Folic acid deficiency
- Iron deficiency

Specific autoantibody tests are available to confirm the diagnosis.

- Antiendomysial antibodies (IgA)
- Tissue transglutaminase antibody (IgA)
- Deamidated gliadin peptide antibody (dGP, IgA and IgG)
- Gliadin assay (IgA and IgG)

Borderline results may be difficult to interpret.

Other tests may include:

- Total IgA
- Histocompatibility antigen typing: HLA-DR3 and DQw2 are present in most patients with coeliac disease. About 5% of those with HLA-DQ are affected by one form or other of coeliac disease
- Small bowel biopsy

The bowel may appear normal because of treatment (medicine or restricted intake of gluten), because there are skip lesions (the sample was taken from an unaffected site) or the intestine may be unaffected by the disease.

Treatment

The medication of choice is [dapsone](#), which considerably reduces the itch within a day or two. The dose required varies from 50 mg to 300 mg daily; refer to DermNet's page about dapsone for potential side effects and monitoring requirements.

For those intolerant or allergic to dapsone, the following may be useful:

- Ultrapotent [topical steroids](#)
- [Systemic steroids](#)
- Sulfapyridine (not available in New Zealand).

A strict gluten-free diet is strongly recommended.

- It reduces the requirement for dapsone
- It improves associated gluten enteropathy
- It enhances nutrition and bone density
- It may reduce the risk of developing other autoimmune conditions
- It probably reduces the risk of intestinal lymphoma.

Related information

Other websites:

- [Manufactured Food Database](#) (NZ) for gluten free diet
- [NZ Coeliac Society](#)
- [Gluten Intolerance Group of North America](#)

- [Dermatitis herpetiformis](#) – emedicine dermatology, the online textbook
- [Dermatitis Herpetiformis](#) – British Association of Dermatologists

Author: DermNet Editorial team
Department of Dermatology, Health Waikato.

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 2001. Last updated 19 Aug 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).

Question 8 of 181



A 64-year-old man presents with a 'rash' on his legs which has developed over the past few days:



Image used on license from [DermNet NZ](#)

He complains of feeling generally 'run-down' but review of systems is unremarkable. What is the most likely underlying cause?



- A. Vasculitis
- B. Erythema multiforme
- C. Necrotising fasciitis
- D. Kaposi sarcoma



- E. Venous eczema

Kaposi sarcoma may cause similar skin changes to the larger lesions but would not typically cause petechiae.

Vasculitis is commonly limited to the skin and may be caused by infections, drugs, autoimmune disorders and malignancy.

Vasculitides

Question stats

A	<div style="width: 63.8%;"></div>	63.8%
B	<div style="width: 14%;"></div>	14%
C	<div style="width: 5%;"></div>	5%
D	<div style="width: 6%;"></div>	6%
E	<div style="width: 11.2%;"></div>	11.2%

63.8% of users answered this question correctly

Session score = 37.5%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Large vessel

- temporal arteritis
- Takayasu's arteritis

Medium vessel

- polyarteritis nodosa
- Kawasaki disease

Small vessel

- ANCA-associated vasculitides (Wegener's*, Churg-Strauss*, microscopic polyangiitis)
- Henoch-Schonlein purpura
- cryoglobulinaemic vasculitis

*may also affect medium-sized vessels

Rate question:

Question 9 of 181



A 15-year-old male returns to the surgery for review. He has a past history of acne and is currently treated with oral lymecycline. There has been no response to treatment and examination reveals evidence of scarring on his face. What is the most suitable treatment?

- A. Oral doxycycline
- B. Oral cyproterone acetate
- ✓ C. Referral for oral retinoin
- D. Referral for UV light therapy
- ✗ E. Topical retinoids

Question stats

A	3.4%
B	1.7%
C	78.9%
D	2.3%
E	13.6%

78.9% of users answered this question correctly

Session score = 33.3%

Patients with scarring should be referred for oral retinoin

Acne vulgaris: management

Acne vulgaris is a common skin disorder which usually occurs in adolescence. It typically affects the face, neck and upper trunk and is characterised by the obstruction of the pilosebaceous follicles with keratin plugs which results in comedones, inflammation and pustules.

Acne may be classified into mild, moderate or severe:

- mild: open and closed comedones with or without sparse inflammatory lesions
- moderate acne: widespread non-inflammatory lesions and numerous papules and pustules
- severe acne: extensive inflammatory lesions, which may include nodules, pitting, and scarring

A simple step-up management scheme often used in the treatment of acne is as follows:

- single topical therapy (topical retinoids, benzyl peroxide)
- topical combination therapy (topical antibiotic, benzoyl peroxide, topical retinoid)
- oral antibiotics: e.g. Oxytetracycline, doxycycline. Improvement may not be seen for 3-4 months. Minocycline is now considered less appropriate due to the possibility of irreversible pigmentation. Gram negative folliculitis may occur as a complication of long-term antibiotic use - high-dose oral trimethoprim is effective if this occurs
- oral isotretinoin: only under specialist supervision

There is no role for dietary modification in patients with acne

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)



Acne vulgaris guidelines

Rate question:

Question 10 of 181



An 84-year-old woman with a history of ischaemic heart disease is reviewed in a nursing home. She has developed tense blistering lesions on her legs. Each lesion is around 1 to 3 cm in diameter and she reports that they are slightly pruritic. Examination of her mouth and vulva is unremarkable. What is the most likely diagnosis?

- A. Pemphigus
- B. Drug reaction to aspirin
-  C. Epidermolysis bullosa
- D. Scabies
-  E. Bullous pemphigoid

Blisters/bullae

- no mucosal involvement (in exams at least*): bullous pemphigoid
- mucosal involvement: pemphigus vulgaris

Bullous pemphigoid

Bullous pemphigoid is an autoimmune condition causing sub-epidermal blistering of the skin. This is secondary to the development of antibodies against hemidesmosomal proteins BP180 and BP230

Bullous pemphigoid is more common in elderly patients. Features include

- itchy, tense blisters typically around flexures
- the blisters usually heal without scarring
- mouth is usually spared*

Skin biopsy






- immunofluorescence shows IgG and C3 at the dermoepidermal junction

Management

- referral to dermatologist for biopsy and confirmation of diagnosis
- oral corticosteroids are the mainstay of treatment
- topical corticosteroids, immunosuppressants and antibiotics are also used

*in reality around 10-50% of patients have a degree of mucosal involvement. It would however be unusual for an exam question to mention mucosal involvement

Question stats

A		10.8%
B		2.8%
C		6%
D		0.6%
E		79.7%

79.7% of users answered this question correctly

Session score = 30%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Bullous pemphigoid

[British Association of Dermatologists](#)

Bullous pemphigoid guidelines

as it is seen as a classic differentiating feature between pemphigoid and pemphigus.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 6 of 231


A 25-year-old man presents with a widespread rash over his body. The torso and limbs are covered with multiple erythematous lesions less than 1 cm in diameter which in parts are covered by a fine scale. You note that two weeks earlier he was seen with to a sore throat when it was noted that he had exudative tonsillitis. Other than a history of asthma he is normally fit and well. What is the most likely diagnosis?

- A. Pityriasis Rosea
- B. Pityriasis versicolor
- C. Syphilis
- D. Discoid eczema
- E. **Guttate psoriasis**


Question stats

A		14.1%
B		8.3%
C		1.3%
D		6.7%
E		69.6%

69.6% of users answered this question correctly

Session score = 66.7%

Psoriasis: guttate

Guttate psoriasis is more common in children and adolescents. It may be precipitated by a streptococcal infection 2-4 weeks prior to the lesions appearing

Features

- tear drop papules on the trunk and limbs

Management

- most cases resolve spontaneously within 2-3 months
- there is no firm evidence to support the use of antibiotics to eradicate streptococcal infection
- topical agents as per psoriasis
- UVB phototherapy
- tonsillectomy may be necessary with recurrent episodes

Rate question:
RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Dermnet NZ](#)

Guttate psoriasis

Question 11 of 181



A 26-year-old male presents with a rash. Examination reveals erythematous oval lesions on his back and upper arms which have a slight scale just inside the edge. They vary in size from 1 to 5 cm in diameter. What is the most likely diagnosis?



A. Lichen planus

B. Guttate psoriasis

C. Lichen sclerosus



D. Pityriasis rosea

E. Pityriasis versicolor

The skin lesions seen in pityriasis rosea are generally larger than those found in guttate psoriasis and scaling is typically confined to the edges

Pityriasis rosea

Overview

- cause unknown, herpes hominis virus 7 (HHV-7) a possibility
- tends to affect young adults

Features

- herald patch (usually on trunk)
- followed by erythematous, oval, scaly patches which follow a characteristic distribution with the longitudinal diameters of the oval lesions running parallel to the line of Langer. This may produce a 'fir-tree' appearance

Management

- self-limiting, usually disappears after 4-6 weeks

Rate question:

Question stats

A		5.7%
B		28%
C		2.3%
D		40.3%
E		23.7%

40.3% of users answered this question correctly

Session score = 27.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of pityriasis rosea

Question 12 of 181



An elderly man complains about the appearance of his nose:



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Sarcoidosis
- B. Basal cell carcinoma
- C. Systemic lupus erythematosus
- D. Alcohol excess
- E. **Acne rosacea**



Question stats

A	6.3%
B	4.5%
C	1.7%
D	8.3%
E	79.1%

79.1% of users answered this question correctly

Session score = 33.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Rosacea guidelines

This man has a rhinophyma, a complication of acne rosacea.

Acne rosacea

Acne rosacea is a chronic skin disease of unknown aetiology

Features

- typically affects nose, cheeks and forehead
- flushing is often first symptom
- telangiectasia are common
- later develops into persistent erythema with papules and pustules
- rhinophyma
- ocular involvement: blepharitis

Management

- topical metronidazole may be used for mild symptoms (i.e. Limited number of papules and pustules, no plaques)
- more severe disease is treated with systemic antibiotics e.g. Oxytetracycline
- recommend daily application of a high-factor sunscreen
- camouflage creams may help conceal redness
- laser therapy may be appropriate for patients with prominent telangiectasia

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 13 of 181



A 62-year-old with a history of acne rosacea presents for advice regarding treatment. Which one of the following interventions has the least role in management?



A. Camouflage creams

B. Topical metronidazole



C. Low-dose topical corticosteroids

D. Laser therapy

E. Use of high-factor sun block

Question stats

A	6.6%
B	6.9%
C	62.7%
D	16.4%
E	7.4%

62.7% of users answered this question correctly

Session score = 30.8%

Acne rosacea

Acne rosacea is a chronic skin disease of unknown aetiology

Features

- typically affects nose, cheeks and forehead
- flushing is often first symptom
- telangiectasia are common
- later develops into persistent erythema with papules and pustules
- rhinophyma
- ocular involvement: blepharitis

Management

- topical metronidazole may be used for mild symptoms (i.e. Limited number of papules and pustules, no plaques)
- more severe disease is treated with systemic antibiotics e.g. Oxytetracycline
- recommend daily application of a high-factor sunscreen
- camouflage creams may help conceal redness
- laser therapy may be appropriate for patients with prominent telangiectasia

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)
Rosacea guidelines

Question 14 of 181



A 26-year-old man who is HIV positive is noted to have developed seborrhoeic dermatitis. Which of the following two complications are most associated with this condition?



- A. Alopecia and otitis externa
- B. **Blepharitis and otitis externa**
- C. Photosensitivity and alopecia
- D. Photosensitivity and blepharitis
- E. Blepharitis and alopecia

Alopecia is not commonly seen in seborrhoeic dermatitis, but may develop if a severe secondary infection develops

Seborrhoeic dermatitis in adults

Seborrhoeic dermatitis in adults is a chronic dermatitis thought to be caused by an inflammatory reaction related to a proliferation of a normal skin inhabitant, a fungus called *Malassezia furfur* (formerly known as *Pityrosporum ovale*). It is common, affecting around 2% of the general population

Features

- eczematous lesions on the sebum-rich areas: scalp (may cause dandruff), periorbital, auricular and nasolabial folds
- otitis externa and blepharitis may develop

Associated conditions include

- HIV
- Parkinson's disease

Scalp disease management

- over the counter preparations containing zinc pyrithione ('Head & Shoulders') and tar ('Neutrogena T/Gel') are first-line
- the preferred second-line agent is ketoconazole
- selenium sulphide and topical corticosteroid may also be useful

Face and body management

- topical antifungals: e.g. Ketoconazole
- topical steroids: best used for short periods
- difficult to treat - recurrences are common

Rate question:

Question stats

A		7.7%
B		62.1%
C		6.4%
D		7.1%
E		16.8%

62.1% of users answered this question correctly

Session score = 35.7%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Overview and pictures of seborrhoeic dermatitis

[Clinical Knowledge Summaries](#)



Seborrhoeic dermatitis guidelines



Question 15 of 181



Which one of the following statements regarding acne vulgaris is incorrect?

- A. Follicular epidermal hyperproliferation results in obstruction of the pilosebaceous follicle
- B. Acne vulgaris affects at least 80% of teenagers
-  C. **Propionibacterium acnes is an anaerobic bacterium**
- D. Typical lesions include comedones and pustules
-  E. **Beyond the age of 25 years acne vulgaris is more common in males**

Acne is actually more common in females after the age of 25 years

Acne vulgaris

Acne vulgaris is a common skin disorder which usually occurs in adolescence. It typically affects the face, neck and upper trunk and is characterised by the obstruction of the pilosebaceous follicle with keratin plugs which results in comedones, inflammation and pustules.

Epidemiology

- affects around 80-90% of teenagers, 60% of whom seek medical advice
- acne may also persist beyond adolescence, with 10-15% of females and 5% of males over 25 years old being affected

Pathophysiology is multifactorial

- follicular epidermal hyperproliferation resulting in the formation of a keratin plug. This in turn causes obstruction of the pilosebaceous follicle. Activity of sebaceous glands may be controlled by androgen, although levels are often normal in patients with acne
- colonisation by the anaerobic bacterium *Propionibacterium acnes*
- inflammation

Rate question:

Question stats

A		7.3%
B		28.7%
C		7.3%
D		3.2%
E		53.5%

53.5% of users answered this question correctly

Session score = 33.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 16 of 181



A 54-year-old woman presents with an unsightly toenail. Nail scrapings demonstrate dermatophyte infection. What is the treatment of choice?



- A. Oral terbinafine for 12 weeks
- B. Oral itraconazole for 4 weeks
- C. Topical itraconazole for 2 weeks
- D. Topical amorolfine for 6 weeks
- E. Oral itraconazole for 1 weeks

Question stats

A	<div style="width: 82.2%;"></div>	82.2%
B	<div style="width: 4.4%;"></div>	4.4%
C	<div style="width: 3.1%;"></div>	3.1%
D	<div style="width: 9.7%;"></div>	9.7%
E	<div style="width: 0.7%;"></div>	0.7%

82.2% of users answered this question correctly

Session score = 37.5%

Fungal nail infections

Onychomycosis is fungal infection of the nails. This may be caused by

- dermatophytes - mainly *Trichophyton rubrum*, accounts for 90% of cases
- yeasts - such as *Candida*
- non-dermatophyte moulds

Features

- 'unsightly' nails are a common reason for presentation
- thickened, rough, opaque nails are the most common finding

Investigation

- nail clippings
- scrapings of the affected nail

Management

- treatment is successful in around 50-80% of people
- diagnosis should be confirmed by microbiology before starting treatment
- dermatophyte infection: oral terbinafine is currently recommended first-line with oral itraconazole as an alternative. Six weeks - 3 months therapy is needed for fingernail infections whilst toenails should be treated for 3 - 6 months
- *Candida* infection: mild disease should be treated with topical antifungals (e.g. Amorolfine) whilst more severe infections should be treated with oral itraconazole for a period of 12 weeks

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Fungal nail infections

Rate question:

Question 17 of 181



A 19-year-old man presents as he has developed a number of skin lesions similar to the one below:



You advise him to use regular emollients to control the itch and scale. What is the most appropriate first-line management?



- A. Topical steroid or combined topical steroid/dithranol
- B. Topical dithranol
- C. Topical coal tar or topical calcipotriol
- D. Topical calcipotriol or combined topical steroid/dithranol



- E. Topical steroid or combined topical steroid/calcipotriol

Question stats

A	12%
B	13.3%
C	12%
D	18.8%
E	43.9%

43.9% of users answered this question correctly

Session score = 35.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[SIGN](#)

2010 Psoriasis guidelines

Psoriasis: management

SIGN released guidelines in 2010 on the management of psoriasis and psoriatic arthropathy. Please see the link for more details.

Chronic plaque psoriasis

- regular emollients may help to reduce scale loss and reduce pruritus
- for acute control SIGN recommend: 'Short term intermittent use of a potent topical corticosteroid or a combined potent corticosteroid plus calcipotriol

ointment is recommended to gain rapid improvement in plaque psoriasis.'

- 'For long term topical treatment of plaque psoriasis a vitamin D analogue (e.g. Calcipotriol) is recommended.'
- 'If a vitamin D analogue is ineffective or not tolerated then consider coal tar (solution, cream or lotion), tazarotene gel, or short contact dithranol (30 minute exposure in patients with a small number of relatively large plaques of psoriasis).

Steroids in psoriasis

- topical steroids are commonly used in flexural psoriasis and there is also a role for mild steroids in facial psoriasis. If steroids are ineffective for these conditions vitamin D analogues or tacrolimus ointment should be used second line
- SIGN caution against the long term use of potent or very potent topical steroids due to the risk of side-effects

Scalp psoriasis

- for short term control SIGN recommend either the use of potent topical corticosteroids or a combination of a potent corticosteroid and a vitamin D

analogue

- 'For patients with thick scaling of the scalp, initial treatment with overnight application of salicylic acid, tar preparations, or oil preparations (eg olive oil, coconut oil) to remove thick scale is recommended.

Secondary care management

Phototherapy

- narrow band ultraviolet B light (311-313nm) is now the treatment of choice
- photochemotherapy is also used - psoralen + ultraviolet A light (PUVA)
- adverse effects: skin ageing, squamous cell cancer (not melanoma)

Systemic therapy

- methotrexate: useful if associated joint disease
- ciclosporin
- systemic retinoids
- biological agents: infliximab, etanercept and adalimumab
- ustekinumab (IL-12 and IL-23 blocker) is showing promise in early trials

Mechanism of action of commonly used drugs:

- coal tar: probably inhibit DNA synthesis
- calcipotriol: vitamin D analogue which reduces epidermal proliferation and restores a normal horny layer
- dithranol: inhibits DNA synthesis, wash off after 30 mins, SE: burning, staining

Rate question:

Question 18 of 181





A 7-year-old boy with a history of atopic eczema is brought to the surgery. Overnight he has developed a painful blistering rash affecting his face and neck. His temperature is 38.1deg.



Image used on license from [DermNet NZ](#)



Which one of the following is most likely to be responsible for this presentation?

- A. Varicella zoster virus
- B. *Streptococcus pneumoniae*
- C. Pox virus
-  D. *Staphylococcus aureus*
-  E. *Herpes simplex virus*

The widespread nature of the rash and systemic upset points away from a diagnosis of impetigo.

Eczema herpeticum

Eczema herpeticum describes a severe primary infection of the skin by herpes simplex virus 1 or 2. It is more commonly seen in children with atopic eczema. As it is potentially life threatening children should be admitted for IV aciclovir

Rate question:

Question stats

A	5.1%
B	2.1%
C	1.2%
D	34.6%
E	57%

57% of users answered this question correctly

Session score = 33.3%

RCGP curriculum

15.10 - Skin Problems



[Knowledge](#)

[Curriculum statement](#)

Question 19 of 181



Which one of the following statements regarding hirsutism is correct?

- A. Cushing's syndrome is the most common cause
- B. Topical eflornithine may be safely used during pregnancy
-  C. **Weight loss may make hirsutism worse in obese patients**
- D. The Ferriman-Gallwey scoring system is used to assess the psychological impact of hirsutism
-  E. **Co-cyprindiol (Dianette) may a useful treatment for patients moderate-severe hirsutism**

Polycystic ovarian syndrome is by far the most common cause in women.

Hirsutism and hypertrichosis

/hirsutism is often used to describe androgen-dependent hair growth in women, with hypertrichosis being used for androgen-independent hair growth

Polycystic ovarian syndrome is the most common causes of hirsutism. Other causes include:

- Cushing's syndrome
- congenital adrenal hyperplasia
- androgen therapy
- obesity: due to peripheral conversion oestrogens to androgens
- adrenal tumour
- androgen secreting ovarian tumour
- drugs: phenytoin

Assessment of hirsutism






- Ferriman-Gallwey scoring system: 9 body areas are assigned a score of 0 - 4, a score > 15 is considered to indicate moderate or severe hirsutism

Management of hirsutism

- advise weight loss if overweight
- cosmetic techniques such as waxing/bleaching - not available on the NHS
- consider using combined oral contraceptive pills such as co-cyprindiol (Dianette) or ethinylestradiol and drospirenone (Yasmin). Co-cyprindiol should not be used long-term due to the increased risk of venous thromboembolism
- facial hirsutism: topical eflornithine - contraindicated in pregnancy and breast-feeding

Causes of hypertrichosis

Question stats

A		9.6%
B		5.6%
C		4.3%
D		12.2%
E		68.4%

68.4% of users answered this question correctly

Session score = 31.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Hirsutism

[DermNet NZ](#)

Hirsutism

- drugs: minoxidil, ciclosporin, diazoxide
- congenital hypertrichosis lanuginosa, congenital hypertrichosis terminalis
- porphyria cutanea tarda
- anorexia nervosa

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 20 of 181



Which of the following is least associated with acanthosis nigricans?

- A. Gastric adenocarcinoma
- B. Cushing's disease
- C. Polycystic ovarian syndrome
- ✓ D. **Anorexia nervosa**
- E. Acromegaly

Question stats

A	<div></div>	7.7%
B	<div></div>	6.5%
C	<div></div>	10.2%
D	<div></div>	63.6%
E	<div></div>	11.9%

63.6% of users answered this question correctly

Session score = 35%

Acanthosis nigricans

Describes symmetrical, brown, velvety plaques that are often found on the neck, axilla and groin

Causes

- gastrointestinal cancer
- insulin-resistant diabetes mellitus
- obesity
- polycystic ovarian syndrome
- acromegaly
- Cushing's disease
- hypothyroidism
- familial
- Prader-Willi syndrome
- drugs: oral contraceptive pill, nicotinic acid

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Acanthosis nigricans

Rate question:

Question 7 of 231



Please look at the image below:



Image used on license from [DermNet NZ](#)



What is the most likely diagnosis?



A. **Plaque psoriasis**



B. **Atopic eczema**

C. Bowen's disease

D. Flexural psoriasis

E. Tinea corporis

Question stats

A	<div style="width: 86.2%;"></div>	86.2%
B	<div style="width: 3.5%;"></div>	3.5%
C	<div style="width: 0.4%;"></div>	0.4%
D	<div style="width: 9.4%;"></div>	9.4%
E	<div style="width: 0.5%;"></div>	0.5%

86.2% of users answered this question correctly

Session score = 57.1%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[SIGN](#)

2010 Psoriasis guidelines

[DermNet NZ](#)

Scalp psoriasis

Psoriasis

Psoriasis is a common and chronic skin disorder. It generally presents with red, scaly patches on the skin although it is now recognised that patients with psoriasis are at increased risk of arthritis and cardiovascular disease.

Pathophysiology

- multifactorial and not yet fully understood
- genetic: associated HLA-B13, -B17, and -Cw6. Strong concordance (70%) in identical twins
- immunological: abnormal T cell activity stimulates keratinocyte proliferation. There is increasing evidence this may be mediated by a novel

group of T helper cells producing IL-17, designated Th17. These cells seem to be a third T-effector cell subset in addition to Th1 and Th2

- environmental: it is recognised that psoriasis may be worsened (e.g. Skin trauma, stress), triggered (e.g. Streptococcal infection) or improved (e.g. Sunlight) by environmental factors

Recognised subtypes of psoriasis

- plaque psoriasis: the most common sub-type resulting in the typical well demarcated red, scaly patches affecting the extensor surfaces, sacrum and scalp
- flexural psoriasis: in contrast to plaque psoriasis the skin is smooth
- guttate psoriasis: transient psoriatic rash frequently triggered by a streptococcal infection. Multiple red, teardrop lesions appear on the body
- pustular psoriasis: commonly occurs on the palms and soles

Other features

- nail signs: pitting, onycholysis
- arthritis

Complications

- psoriatic arthropathy (around 10%)
- increased incidence of metabolic syndrome
- increased incidence of cardiovascular disease
- psychological distress

Rate question:

Question 21 of 181



A 64-year-old woman presents with severe mucosal ulceration associated with the development of blistering lesions over her torso and arms. On examination the blisters are flaccid and easily ruptured when touched. What is the most likely diagnosis?



- A. Pemphigus vulgaris
- B. Pemphigoid
- C. Dermatitis herpetiformis
- D. Psoriasis



- E. Epidermolysis bullosa

Blisters/bullae

- no mucosal involvement: bullous pemphigoid
- mucosal involvement: pemphigus vulgaris

Pemphigus vulgaris

Pemphigus vulgaris is an autoimmune disease caused by antibodies directed against desmoglein, a cadherin-type epithelial cell adhesion molecule. It is more common in the Ashkenazi Jewish population

Features

- mucosal ulceration is common and often the presenting symptom. Oral involvement is seen in 50-70% of patients
- skin blistering - flaccid, easily ruptured vesicles and bullae. Lesions are typically painful but not itchy. These may develop months after the initial mucosal symptoms. Nikolsky's describes the spread of bullae following application of horizontal, tangential pressure to the skin
- acantholysis on biopsy

Management

- steroids
- immunosuppressants

Rate question:

Question stats

A	<div style="width: 68.7%;"></div>	68.7%
B	<div style="width: 19.1%;"></div>	19.1%
C	<div style="width: 1.9%;"></div>	1.9%
D	<div style="width: 0.1%;"></div>	0.1%
E	<div style="width: 10.2%;"></div>	10.2%

68.7% of users answered this question correctly

Session score = 33.3%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of widespread pemphigus vulgaris



[DermNet NZ](#)

Picture of oral pemphigus vulgaris






Question 22 of 181



An 18-year-old man presents due a number of itchy skin lesions on his arms and trunk. On examination the lesions are coppery brown in colour and scaly. A diagnosis of pityriasis versicolor is suspected. Which one of the following is the most appropriate treatment?

- A. Topical dapsone
- B. Topical fusidic acid
-  C. **Topical selenium sulphide**
-  D. Topical hydrocortisone
- E. Phototherapy with UVB

Question stats

A		12.1%
B		5.9%
C		65.5%
D		14%
E		2.5%

65.5% of users answered this question correctly

Session score = 31.8%

Pityriasis versicolor

Pityriasis versicolor, also called tinea versicolor, is a superficial cutaneous fungal infection caused by *Malassezia furfur* (formerly termed *Pityrosporum ovale*)

Features

- most commonly affects trunk
- patches may be hypopigmented, pink or brown (hence versicolor)
- scale is common
- mild pruritus

Predisposing factors

- occurs in healthy individuals
- immunosuppression
- malnutrition
- Cushing's

Management

- topical antifungal e.g. terbinafine or selenium sulphide
- if extensive disease or failure to respond to topical treatment then consider oral itraconazole

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of pityriasis versicolor 1

[DermNet NZ](#)

Picture of pityriasis versicolor 2

[DermNet NZ](#)

Hypopigmentation post pityriasis versicolor

Question 23 of 181


A 19-year-old female who has just started work as a cleaner presents with a rash on her hands. On examination there is a generalised erythematous rash on the dorsum of both hands. There is no evidence of scaling or vesicles. What is the most likely diagnosis?



- A. Tinea manuum
- B. **Irritant contact dermatitis**
- C. Allergic contact dermatitis
- D. Ichthyosis vulgaris
- E. Pustular psoriasis

The strong alkalis and acids found in cleaning solutions are common triggers of irritant contact dermatitis

Contact dermatitis

There are two main types of contact dermatitis

- irritant contact dermatitis: common - non-allergic reaction due to weak acids or alkalis (e.g. detergents). Often seen on the hands. Erythema is typical, crusting and vesicles are rare
- allergic contact dermatitis: type IV hypersensitivity reaction. Uncommon - often seen on the head following hair dyes. Presents as an acute weeping eczema which predominately affects the margins of the hairline rather than the hairy scalp itself. Topical treatment with a potent steroid is indicated

Cement is a frequent cause of contact dermatitis. The alkaline nature of cement may cause an irritant contact dermatitis whilst the dichromates in cement also can cause an allergic contact dermatitis

Rate question:

Question stats

A	<div style="width: 0.7%;"></div>	0.7%
B	<div style="width: 86.5%;"></div>	86.5%
C	<div style="width: 12.3%;"></div>	12.3%
D	<div style="width: 0.3%;"></div>	0.3%
E	<div style="width: 0.2%;"></div>	0.2%

86.5% of users answered this question correctly

Session score = 34.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 24 of 181


You review a 50-year-old man who has psoriasis. Which one of the following medications is most likely exacerbate his condition?



- A. Nicorandil
- B. Simvastatin
- C. **Verapamil**
- D. **Atenolol**
- E. Isosorbide mononitrate

Question stats

A		15.4%
B		10.2%
C		16.3%
D		51.2%
E		6.9%

51.2% of users answered this question correctly

Session score = 33.3%

Psoriasis: exacerbating factors

The following factors may exacerbate psoriasis:

- trauma
- alcohol
- drugs: beta blockers, lithium, antimalarials (chloroquine and hydroxychloroquine), NSAIDs and ACE inhibitors
- withdrawal of systemic steroids

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

Question 25 of 181



Which one of the following complications is most associated with psoralen + ultraviolet A light (PUVA) therapy?



A. Squamous cell cancer

B. Osteoporosis



C. Basal cell cancer

D. Dermoid cysts

E. Malignant melanoma

The most significant complication of PUVA therapy for psoriasis is squamous cell skin cancer.

Psoriasis: management

SIGN released guidelines in 2010 on the management of psoriasis and psoriatic arthropathy. Please see the link for more details.

Chronic plaque psoriasis

- regular emollients may help to reduce scale loss and reduce pruritus
- for acute control SIGN recommend: 'Short term intermittent use of a potent topical corticosteroid or a combined potent corticosteroid plus calcipotriol

ointment is recommended to gain rapid improvement in plaque psoriasis.'

- 'For long term topical treatment of plaque psoriasis a vitamin D analogue (e.g. Calcipotriol) is recommended.'
- 'If a vitamin D analogue is ineffective or not tolerated then consider coal tar (solution, cream or lotion), tazarotene gel, or short contact dithranol (30 minute exposure in patients with a small number of relatively large plaques of psoriasis).

Steroids in psoriasis

- topical steroids are commonly used in flexural psoriasis and there is also a role for mild steroids in facial psoriasis. If steroids are ineffective for these conditions vitamin D analogues or tacrolimus ointment should be used second line
- SIGN caution against the long term use of potent or very potent topical steroids due to the risk of side-effects

Scalp psoriasis

- for short term control SIGN recommend either the use of potent topical corticosteroids or a combination of a potent corticosteroid and a vitamin D

analogue

Question stats

A	<div></div>	61.1%
B	<div></div>	3.8%
C	<div></div>	12.9%
D	<div></div>	2.8%
E	<div></div>	19.4%

61.1% of users answered this question correctly

Session score = 32%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[SIGN](#)

2010 Psoriasis guidelines

- 'For patients with thick scaling of the scalp, initial treatment with overnight application of salicylic acid, tar preparations, or oil preparations (eg olive oil, coconut oil) to remove thick scale is recommended.

Secondary care management

Phototherapy

- narrow band ultraviolet B light (311-313nm) is now the treatment of choice
- photochemotherapy is also used - psoralen + ultraviolet A light (PUVA)
- adverse effects: skin ageing, squamous cell cancer (not melanoma)

Systemic therapy

- methotrexate: useful if associated joint disease
- ciclosporin
- systemic retinoids
- biological agents: infliximab, etanercept and adalimumab
- ustekinumab (IL-12 and IL-23 blocker) is showing promise in early trials

Mechanism of action of commonly used drugs:

- coal tar: probably inhibit DNA synthesis
- calcipotriol: vitamin D analogue which reduces epidermal proliferation and restores a normal horny layer
- dithranol: inhibits DNA synthesis, wash off after 30 mins, SE: burning, staining

Rate question:

Question 26 of 181



A 60-year-old man asks you to have a look at a 'sore' on his right ear.



Image used on license from [DermNet NZ](#) and with the kind permission of Prof Raimo Suhonen

It has been present for around 6 months and is not painful. What is the most likely diagnosis?

- A. Fungal otitis externa
- ✓ B. Actinic keratosis
- C. Pyogenic granuloma
- D. Basal cell carcinoma
- ✗ E. Chondrodermatitis nodularis helicis

Chondrodermatitis nodularis helicis is usually painful.

Actinic keratoses

Actinic, or solar, keratoses (AK) is a common premalignant skin lesion that develops as a consequence of chronic sun exposure

Features

- small, crusty or scaly, lesions
- may be pink, red, brown or the same colour as the skin
- typically on sun-exposed areas e.g. temples of head
- multiple lesions may be present

Question stats

A	1.4%
B	50.7%
C	3.6%
D	9.1%
E	35.2%

50.7% of users answered this question correctly

Session score = 30.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[British Association of Dermatologists](#)

2007 Actinic keratoses guidelines

[DermNet NZ](#)

Actinic keratoses

Management options include

- prevention of further risk: e.g. sun avoidance, sun cream
- fluorouracil cream: typically a 2 to 3 week course. The skin will become red and inflamed - sometimes topical hydrocortisone is given following fluorouracil to help settle the inflammation
- topical diclofenac: may be used for mild AKs. Moderate efficacy but much fewer side-effects
- topical imiquimod: trials have shown good efficacy
- cryotherapy
- curettage and cautery

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 27 of 181



A 59-year-old man presents with a new skin lesion which has developed over the past few months:



Image used on license from [DermNet NZ](#)

You plan to refer the patient to dermatology. What is the most likely diagnosis?

- A. Malignant melanoma
- B. Actinic keratosis
- C. **Bowen's disease**
- D. Basal cell carcinoma
- E. Seborrhoeic keratosis



Question stats

A	30.2%
B	5.2%
C	54.6%
D	8.1%
E	1.9%

54.6% of users answered this question correctly

Session score = 29.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Bowen's disease

Bowen's disease

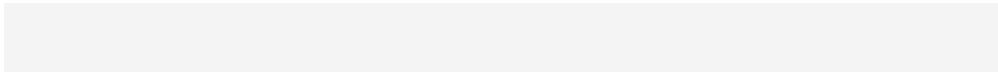
Bowen's disease is a type of intraepidermal squamous cell carcinoma. More common in elderly females. There is around a 3% chance of developing invasive skin cancer

Features

- red, scaly patches

- often occur on the lower limbs

Rate question:



Question 28 of 181



Please look at the image below:



Image used on license from [DermNet NZ](#)

Which one of the following is this patient most likely to go on and develop?

- A. Parkinson's disease
- B. Hypothyroidism
- ☒ C. Rheumatoid arthritis
- D. Sarcoidosis
- ☒ E. Metabolic syndrome

Along with psoriatic arthritis, metabolic syndrome is one of the most common and significant complications of psoriasis.

Psoriasis

Psoriasis is a common and chronic skin disorder. It generally presents with red, scaly patches on the skin although it is now recognised that patients with psoriasis are at increased risk of arthritis and cardiovascular disease.

Pathophysiology

- multifactorial and not yet fully understood
- genetic: associated HLA-B13, -B17, and -Cw6. Strong concordance (70%) in identical twins
- immunological: abnormal T cell activity stimulates keratinocyte

Question stats

A	10.3%
B	14.1%
C	33.1%
D	11.7%
E	30.7%

30.7% of users answered this question correctly

Session score = 28.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[SIGN](#)

2010 Psoriasis guidelines

[DermNet NZ](#)

Scalp psoriasis

proliferation. There is increasing evidence this may be mediated by a novel group of T helper cells producing IL-17, designated Th17. These cells seem to be a third T-effector cell subset in addition to Th1 and Th2

- environmental: it is recognised that psoriasis may be worsened (e.g. Skin trauma, stress), triggered (e.g. Streptococcal infection) or improved (e.g. Sunlight) by environmental factors

Recognised subtypes of psoriasis

- plaque psoriasis: the most common sub-type resulting in the typical well demarcated red, scaly patches affecting the extensor surfaces, sacrum and scalp
- flexural psoriasis: in contrast to plaque psoriasis the skin is smooth
- guttate psoriasis: transient psoriatic rash frequently triggered by a streptococcal infection. Multiple red, teardrop lesions appear on the body
- pustular psoriasis: commonly occurs on the palms and soles

Other features

- nail signs: pitting, onycholysis
- arthritis

Complications

- psoriatic arthropathy (around 10%)
- increased incidence of metabolic syndrome
- increased incidence of cardiovascular disease
- psychological distress

Rate question:



Question 29 of 181



A 34-year-old who has recently returned from a business trip to New York presents with a one-day history of a painful rash on his neck:



What is the most appropriate management?

- A. Topical fusidic acid
-  B. **Topical clotrimazole + hydrocortisone**
- C. Oral aciclovir + prednisolone
-  D. **Oral aciclovir**
- E. Send blood for antibodies to *Borrelia burgdorferi*

One of the main clues in the question is the combination of a rash with pain. Other than shingles, there are not many conditions which cause both.

Whilst there is some evidence that systemic steroids speed up the healing of shingles, consensus guidelines do not advocate their use as adverse effects probably outweigh potential benefits.

Herpes zoster

Question stats

A	10%
B	3.6%
C	8%
D	73.3%
E	5.1%

73.3% of users answered this question correctly

Session score = 27.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Shingles guidelines

Shingles is an acute, unilateral, painful blistering rash caused by reactivation of the Varicella Zoster Virus (VZV)

Management

- oral aciclovir

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 30 of 181



A 30-year-old man is investigated for recurrent nose bleeds and iron deficiency anaemia. You notice a number of erythematous lesions on his skin:



Image used on license from [DermNet NZ](#)

What is the most likely underlying diagnosis?

- A. Peutz-Jeghers syndrome
- B. Alcohol excess
- ☒ C. Hereditary haemorrhagic telangiectasia
- D. Haemophilia A
- E. Idiopathic thrombocytopenic purpura

Question stats

A	15%
B	3.9%
C	63.9%
D	2.8%
E	14.4%

63.9% of users answered this question correctly

Session score = 30%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Hereditary haemorrhagic telangiectasia

[Postgraduate Medical Journal](#)

Review of HHT

Hereditary haemorrhagic telangiectasia

Also known as Osler-Weber-Rendu syndrome, hereditary haemorrhagic telangiectasia (HHT) is an autosomal dominant condition characterised by (as the name suggests) multiple telangiectasia over the skin and mucous membranes. Twenty percent of cases occur spontaneously without prior family history.

There are 4 main diagnostic criteria. If the patient has 2 then they are said to have a possible diagnosis of HHT. If they meet 3 or more of the criteria they are said to have a definite diagnosis of HHT:

- epistaxis : spontaneous, recurrent nosebleeds
- telangiectases: multiple at characteristic sites (lips, oral cavity, fingers,

nose)

- visceral lesions: for example gastrointestinal telangiectasia (with or without bleeding), pulmonary arteriovenous malformations (AVM), hepatic AVM, cerebral AVM, spinal AVM
- family history: a first-degree relative with HHT

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 8 of 231



A 60-year-old man asks you to have a look at a skin lesion:



Image used on license from DermNet.NZ



What is the most likely diagnosis?



- A. Malignant melanoma
- B. Seborrhoeic keratosis
- C. Bowen's disease
- D. Dermatitis papulosa nigra
- E. Actinic keratosis

Question stats

A	15.2%
B	63.3%
C	4.2%
D	8.9%
E	8.4%

63.3% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

DermNet.NZ

Seborrhoeic keratoses

Seborrhoeic keratoses

Seborrhoeic keratoses are benign epidermal skin lesions seen in older people.

Features

- large variation in colour from flesh to light-brown to black
- have a 'stuck-on' appearance
- keratotic plugs may be seen on the surface

Management

- reassurance about the benign nature of the lesion is an option

- options for removal include curettage, cryosurgery and shave biopsy

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 31 of 181



A 78-year-old woman presents with a raised skin lesion on her face:



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- A. Keratoacanthoma
- ✓ B. Basal cell carcinoma
- C. Actinic keratosis
- ✗ D. Squamous cell carcinoma
- E. Malignant melanoma

Question stats

A	10.3%
B	52.4%
C	17.6%
D	17.4%
E	2.2%

52.4% of users answered this question correctly

Session score = 29%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Basal cell carcinoma

Basal cell carcinoma

Basal cell carcinoma (BCC) is one of the three main types of skin cancer. Lesions are also known as rodent ulcers and are characterised by slow-growth and local invasion. Metastases are extremely rare. BCC is the most common type of cancer in the Western world.

Features

- many types of BCC are described. The most common type is nodular BCC, which is described here
- sun-exposed sites, especially the head and neck account for the majority of lesions

- initially a pearly, flesh-coloured papule with telangiectasia
- may later ulcerate leaving a central 'crater'

Management options:

- surgical removal
- curettage
- cryotherapy
- topical cream: imiquimod, fluorouracil
- radiotherapy

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 32 of 181


Which one of the following factors would predispose a patient to forming keloid scars?

- A. Having white skin
- B. Incisions along relaxed skin tension lines
- ✓ C. Being aged 20-40 years
- D. Being female
- ✗ E. Having a wound on the lower back

Keloid scars - more common in young, black, male adults

Question stats

A	1.9%
B	18.3%
C	45.2%
D	15.9%
E	18.7%

45.2% of users answered this question correctly

Session score = 28.1%

Keloid scars

Keloid scars are tumour-like lesions that arise from the connective tissue of a scar and extend beyond the dimensions of the original wound

Predisposing factors

- ethnicity: more common in people with dark skin
- occur more commonly in young adults, rare in the elderly
- common sites (in order of decreasing frequency): sternum, shoulder, neck, face, extensor surface of limbs, trunk

Keloid scars are less likely if incisions are made along relaxed skin tension lines*

Treatment

- early keloids may be treated with intra-lesional steroids e.g. triamcinolone
- excision is sometimes required

*Langer lines were historically used to determine the optimal incision line. They were based on procedures done on cadavers but have been shown to produce worse cosmetic results than when following skin tension lines

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 33 of 181


A 34-year-old female presents to her GP due to a skin rash under her new wrist watch. An allergy to nickel is suspected. What is the best investigation?



- A. Skin prick test
- B. **Skin patch test**
- C. Skin biopsy
- D. Serum IgE
- E. Serum nickel antibodies

Question stats

A		13.8%
B		81.1%
C		0.2%
D		3%
E		1.9%

81.1% of users answered this question correctly

Session score = 30.3%

Nickel dermatitis

Nickel is a common cause allergic contact dermatitis and is an example of a type IV hypersensitivity reaction. It is often caused by jewellery such as watches

It is diagnosed by a skin patch test

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 34 of 181



A 62-year-old female is referred due to a long-standing ulcer above the right medial malleolus. Ankle-brachial pressure index readings are as follows:

Right	0.95
Left	0.95

To date it has been managed by the District Nurse with standard dressings. What is the most appropriate management to maximize the likelihood of the ulcer healing?



- A. Compression bandaging
- B. Intermittent pneumatic compression
- C. Hydrocolloid dressings
- D. Refer to vascular surgeon
- E. Topical flucloxacillin



Management of venous ulceration - compression bandaging

The ankle-brachial pressure index readings indicate a reasonable arterial supply and suggest the ulcers are venous in nature.

Venous ulceration

Venous ulceration is typically seen above the medial malleolus

Investigations

- ankle-brachial pressure index (ABPI) is important in non-healing ulcers to assess for poor arterial flow which could impair healing
- a 'normal' ABPI may be regarded as between 0.9 - 1.2. Values below 0.9 indicate arterial disease. Interestingly, values above 1.3 may also indicate arterial disease, in the form of false-negative results secondary to arterial calcification (e.g. In diabetics)

Management

- compression bandaging, usually four layer (only treatment shown to be of real benefit)
- oral pentoxifylline, a peripheral vasodilator, improves healing rate
- small evidence base supporting use of flavinoids
- little evidence to suggest benefit from hydrocolloid dressings, topical growth factors, ultrasound therapy and intermittent pneumatic compression

Question stats

A	<div></div>	73.7%
B	<div></div>	3.2%
C	<div></div>	12.1%
D	<div></div>	10.5%
E	<div></div>	0.4%

73.7% of users answered this question correctly

Session score = 29.4%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[BMJ](#)

Management of venous leg ulcers

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 35 of 181


A 5-week-old girl is brought to the surgery due to a rash on her scalp:



What is the most appropriate management?

- A. Referral to paediatric dermatologist
- B. Swab rash and prescribe topical fusidic acid
- ✓ C. Baby shampoo and baby oil
- D. Topical hydrocortisone
- ✗ E. Topical ketoconazole

Question stats

A	1.1%
B	1.7%
C	80.8%
D	2.8%
E	13.6%

80.8% of users answered this question correctly

Session score = 28.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Seborrhoeic dermatitis in children

Seborrhoeic dermatitis is a relatively common skin disorder seen in children. It typically affects the scalp ('Cradle cap'), nappy area, face and limb flexures.

Cradle cap is an early sign which may develop in the first few weeks of life. It is characterised by an erythematous rash with coarse yellow scales.

Management depends on severity

- mild-moderate: baby shampoo and baby oils
- severe: mild topical steroids e.g. 1% hydrocortisone

Seborrhoeic dermatitis in children tends to resolve spontaneously by around 8

months of age

Rate question:

Question 36 of 181



A 41-year-old man presents with an itchy rash over his arms and abdomen. It has got gradually worse over the past three days.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?



A. **Scabies**

B. Pityriasis rosea



C. **Erythema multiforme**

D. Urticaria

E. Guttate psoriasis

The linear burrows of the scabies mite are clearly seen on this image.

Scabies

Scabies is caused by the mite *Sarcoptes scabiei* and is spread by prolonged skin contact. It typically affects children and young adults.

The scabies mite burrows into the skin, laying its eggs in the stratum corneum. The intense pruritus associated with scabies is due to a delayed type IV hypersensitivity reaction to mites/eggs which occurs about 30 days after the initial infection.

Features

Question stats

A	<div style="width: 51.7%;"></div>	51.7%
B	<div style="width: 15.9%;"></div>	15.9%
C	<div style="width: 7.1%;"></div>	7.1%
D	<div style="width: 7%;"></div>	7%
E	<div style="width: 18.4%;"></div>	18.4%

51.7% of users answered this question correctly

Session score = 27.8%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[National Prescribing Centre](#)
2008 Scabies guidelines

[Postgraduate Medical Journal](#)
Review of scabies

[Postgraduate Medical Journal](#)
Scabies management

widespread pruritus

- linear burrows on the side of fingers, interdigital webs and flexor aspects of the wrist
- in infants the face and scalp may also be affected
- secondary features are seen due to scratching: excoriation, infection

Management

- permethrin 5% is first-line
- malathion 0.5% is second-line
- give appropriate guidance on use (see below)
- pruritus persists for up to 4-6 weeks post eradication

Patient guidance on treatment (from Clinical Knowledge Summaries)

- avoid close physical contact with others until treatment is complete
- all household and close physical contacts should be treated at the same time, even if asymptomatic
- launder, iron or tumble dry clothing, bedding, towels, etc., on the first day of treatment to kill off mites.

The BNF advises to apply the insecticide to all areas, including the face and scalp, contrary to the manufacturer's recommendation. Patients should be given the following instructions:

- apply the insecticide cream or liquid to cool, dry skin
- pay close attention to areas between fingers and toes, under nails, armpit area, creases of the skin such as at the wrist and elbow
- allow to dry and leave on the skin for 8–12 hours for permethrin, or for 24 hours for malathion, before washing off
- reapply if insecticide is removed during the treatment period, e.g. If wash hands, change nappy, etc
- repeat treatment 7 days later

Rate question:

Question 37 of 181



A 34-year-old man comes to surgery. He has been generally unwell since an episode of diarrhoea four weeks ago, with joint pains, pain on passing water and a rash on the soles of his feet:



What does this rash likely represent?

- A. Pompholyx
- B. HIV-associated dermopathy
- C. Plantar pustular psoriasis
- D. Mosaic warts
- E. Keratoderma blennorrhagica



Question stats

A	12.5%
B	11.7%
C	16.5%
D	4.9%
E	54.4%

54.4% of users answered this question correctly

Session score = 27%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of keratoderma blennorrhagica

Reactive arthritis: features

Reactive arthritis is one of the HLA-B27 associated seronegative spondyloarthropathies. It encompasses Reiter's syndrome, a term which described a classic triad of urethritis, conjunctivitis and arthritis following a dysenteric illness during the Second World War. Later studies identified patients who developed symptoms following a sexually transmitted infection (post-STI, now sometimes referred to as sexually acquired reactive arthritis, SARA).

Reactive arthritis is defined as an arthritis that develops following an infection where the organism cannot be recovered from the joint.

Features

- typically develops within 4 weeks of initial infection - symptoms generally

last around 4-6 months

- arthritis is typically an asymmetrical oligoarthritis of lower limbs
- dactylitis
- symptoms of urethritis
- eye: conjunctivitis (seen in 50%), anterior uveitis
- skin: circinate balanitis (painless vesicles on the coronal margin of the prepuce), keratoderma blenorrhagica (waxy yellow/brown papules on palms and soles)

Around 25% of patients have recurrent episodes whilst 10% of patients develop chronic disease

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 38 of 181



A 35-year-old female presents with tender, erythematous nodules over her forearms. Blood tests reveal:

Calcium 2.78 mmol/l

What is the most likely diagnosis?



- A. Granuloma annulare
- B. Erythema nodosum
- C. Lupus pernio
- D. Erythema multiforme
- E. Necrobiosis lipoidica

The likely underlying diagnosis is sarcoidosis

Erythema nodosum

Overview

- inflammation of subcutaneous fat
- typically causes tender, erythematous, nodular lesions
- usually occurs over shins, may also occur elsewhere (e.g. forearms, thighs)
- usually resolves within 6 weeks
- lesions heal without scarring

Causes

- infection: streptococci, TB, brucellosis
- systemic disease: sarcoidosis, inflammatory bowel disease, Behcet's
- malignancy/lymphoma
- drugs: penicillins, sulphonamides, combined oral contraceptive pill
- pregnancy

Rate question:

Question stats

A	<div style="width: 8.4%;"></div>	8.4%
B	<div style="width: 70.1%;"></div>	70.1%
C	<div style="width: 12.6%;"></div>	12.6%
D	<div style="width: 5.3%;"></div>	5.3%
E	<div style="width: 3.6%;"></div>	3.6%

70.1% of users answered this question correctly

Session score = 28.9%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema nodosum

Question 39 of 181


A patient presents to his GP following the development of an urticarial skin rash following the introduction of a new drug. Which one of the following is most likely to be responsible?



- A. Omeprazole
- B. Sodium valproate
- C. Aspirin
- D. Paracetamol
- E. Simvastatin

Aspirin is a common cause of urticaria

Although all medications can potentially cause urticaria it is commonly seen secondary to aspirin

Drug causes of urticaria

The following drugs commonly cause urticaria:

- aspirin
- penicillins
- NSAIDs
- opiates

Rate question:

Question stats

A	7.7%
B	22.5%
C	62.9%
D	0.7%
E	6.2%

62.9% of users answered this question correctly

Session score = 28.2%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 40 of 181



The district nurses inform you that one of your patients has developed a pressure ulcer over the sacrum. The patient is elderly and frail but systemically well. Which one of the following should not be part of your management plan?

- A. Referral for surgical debridement
- B. Hydrocolloid dressings
- C. Referral to the tissue viability nurse
- D. Detailed documentation of the ulcer including a photograph
- E. Routine swabbing of the wound



Question stats

A	<div></div>	27.9%
B	<div></div>	5.3%
C	<div></div>	2.1%
D	<div></div>	2.1%
E	<div></div>	62.5%

62.5% of users answered this question correctly

Session score = 30%

Pressure ulcers

The following is based on a 2009 NHS Best Practice Statement. Please see the link for further details. Some selected points are listed below. NICE also published guidelines in 2005.

Pressure ulcers develop in patients who are unable to move parts of their body due to illness, paralysis or advancing age. They typically develop over bony prominences such as the sacrum or heel. The following factors predispose to the development of pressure ulcers:

- malnourishment
- incontinence
- lack of mobility
- pain (leads to a reduction in mobility)

Grading of pressure ulcers - the following is taken from the European Pressure Ulcer Advisory Panel classification system.

Grade 1	Non-blanchable erythema of intact skin. Discolouration of the skin, warmth, oedema, induration or hardness may also be used as indicators, particularly on individuals with darker skin
Grade 2	Partial thickness skin loss involving epidermis or dermis, or both. The ulcer is superficial and presents clinically as an abrasion or blister
Grade 3	Full thickness skin loss involving damage to or necrosis of subcutaneous tissue that may extend down to, but not through, underlying fascia.
Grade 4	Extensive destruction, tissue necrosis, or damage to muscle, bone or supporting structures with or without full thickness skin loss

Management

- a moist wound environment encourages ulcer healing. Hydrocolloid

RCGP curriculum

9 - Care of Older Adults

[Curriculum statement](#)

External links

[NHS](#)

Prevention and management of pressure ulcers

[NICE](#)

The prevention and treatment of pressure ulcers

dressings and hydrogels may help facilitate this. The use of soap should be discouraged to avoid drying the wound

- wound swabs should not be done routinely as the vast majority of pressure ulcers are colonised with bacteria. The decision to use systemic antibiotics should be taken on a clinical basis (e.g. Evidence of surrounding cellulitis)
- consider referral to the tissue viability nurse
- surgical debridement may be beneficial for selected wounds

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 9 of 231

A 67-year-old man with a history of Parkinson's disease presents due to the development of an itchy, red rash on his neck, behind his ears and around the nasolabial folds. He had a similar flare up last winter but did not seek medical attention. What is the most likely diagnosis?



- A. Levodopa associated dermatitis
- B. **Seborrhoeic dermatitis**
- C. Flexural psoriasis
- D. Acne rosacea
- E. Fixed drug reaction to ropinirole

Seborrhoeic dermatitis is more common in patients with Parkinson's disease

Seborrhoeic dermatitis in adults

Seborrhoeic dermatitis in adults is a chronic dermatitis thought to be caused by an inflammatory reaction related to a proliferation of a normal skin inhabitant, a fungus called *Malassezia furfur* (formerly known as *Pityrosporum ovale*). It is common, affecting around 2% of the general population

Features

- eczematous lesions on the sebum-rich areas: scalp (may cause dandruff), periorbital, auricular and nasolabial folds
- otitis externa and blepharitis may develop

Associated conditions include

- HIV
- Parkinson's disease

Scalp disease management

- over the counter preparations containing zinc pyrithione ('Head & Shoulders') and tar ('Neutrogena T/Gel') are first-line
- the preferred second-line agent is ketoconazole
- selenium sulphide and topical corticosteroid may also be useful

Face and body management

- topical antifungals: e.g. Ketoconazole
- topical steroids: best used for short periods
- difficult to treat - recurrences are common

Rate question:

Question stats

A		12.1%
B		68.9%
C		6.4%
D		7.1%
E		5.6%

68.9% of users answered this question correctly

Session score = 55.6%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

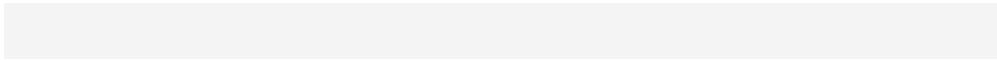
External links

[DermNet NZ](#)

Overview and pictures of seborrhoeic dermatitis

[Clinical Knowledge Summaries](#)

Seborrhoeic dermatitis guidelines



All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 41 of 181



A 41-year-old woman shows you a rash on her legs:



Image used on license from [DermNet NZ](#)



What is the most likely cause of such a rash?



A. Domestic abuse

B. Excessive ultraviolet light

C. Drug reaction



D. Infrared radiation

E. Syphilis

This patient has erythema ab igne, a skin reaction caused by excessive infrared radiation.

Erythema ab igne

Erythema ab igne is a skin disorder caused by over exposure to infrared radiation. Characteristic features include erythematous patches with hyperpigmentation and telangiectasia. A typical history would be an elderly women who always sits next to an open fire

If the cause is not treated then patients may go on to develop squamous cell skin cancer

Rate question:

Question stats

A	2.7%
B	20.8%
C	14.7%
D	60.2%
E	1.6%

60.2% of users answered this question correctly

Session score = 29.3%

RCGP curriculum

15.10 - Skin Problems

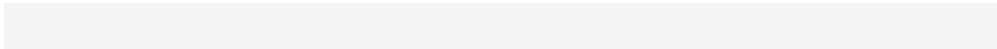
[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema ab igne



Question 42 of 181



A 50-year-old man who has had a cough for the past week develops a rash. It initially appeared on his arms but has now spread to the torso:



Image used on license from [DermNet NZ](#)

What is the most likely underlying diagnosis?

- A. Goodpasture's syndrome
- B. Adenovirus
- ☒ C. *Mycoplasma pneumoniae*
- D. *Legionella pneumophila*
- E. Rhinovirus

This patient has developed erythema multiforme (EM), a known complication of *Mycoplasma* infection. *Mycoplasma pneumoniae* is the second most common trigger of EM after the herpes simplex virus.

Erythema multiforme

Features

- target lesions
- initially seen on the back of the hands / feet before spreading to the torso
- upper limbs are more commonly affected than the lower limbs
- pruritus is occasionally seen and is usually mild

If symptoms are severe and involve blistering and mucosal involvement the term

Question stats

A	14.2%
B	6%
C	70.1%
D	7.6%
E	2%

70.1% of users answered this question correctly

Session score = 31%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Erythema multiforme

Stevens-Johnson syndrome is used.

Causes

- viruses: herpes simplex virus (the most common cause), Orf*
- idiopathic
- bacteria: *Mycoplasma*, *Streptococcus*
- drugs: penicillin, sulphonamides, carbamazepine, allopurinol, NSAIDs, oral contraceptive pill, nevirapine
- connective tissue disease e.g. Systemic lupus erythematosus
- sarcoidosis
- malignancy

*Orf is a skin disease of sheep and goats caused by a parapox virus

Rate question:

Questions 43 to 45 of 181



Theme: Skin disorders affecting the soles of the feet

- A Pitted keratolysis
- B Mosaic wart
- C Acquired keratoderma
- D Juvenile plantar dermatosis
- E Palmoplantar pustulosis
- F Tinea pedis
- G Callus
- H Idiopathic plantar hidradenitis
- I Exfoliative keratolysis
- J Contact dermatitis

Question stats

Average score for registered users:

43	<div></div>	44.8%
44	<div></div>	42.8%
45	<div></div>	39.7%

Session score = 31.1%

For each one of the following scenarios please select the most likely diagnosis:

43. A 23-year-old female presents with red, thickened skin on the soles. On closer inspection a crop of raised lesions are seen.



Juvenile plantar dermatosis

The correct answer is Palmoplantar pustulosis

44. A 22-year-old man presents with a 3 cm area of hyperkeratotic skin on the heel of his right foot. A number of pinpoint petechiae are seen in the lesion.



Pitted keratolysis

The correct answer is Mosaic wart

45. A 15-year-old complains of excessively smelly feet. On examination he has white skin over the sole of the forefoot bilaterally. Small holes can be seen on the surface of the affected skin.



Pitted keratolysis

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Skin disorders affecting the soles of the feet

The table below gives characteristic exam question features for conditions affecting the soles of the feet

Verrucas	Secondary to the human papilloma virus Firm, hyperkeratotic lesions Pinpoint petechiae centrally within the lesions May coalesce with surrounding warts to form mosaic warts
Tinea pedis	More commonly called Athlete's foot Affected skin is moist, flaky and itchy
Corn and calluses	A corn is small areas of very thick skin secondary to a reactive hyperkeratosis A callus is larger, broader and has a less well defined edge than a corn
Keratoderma	May be acquired or congenital Describes a thickening of the skin of the palms and soles Acquired causes include reactive arthritis (keratoderma blennorrhagica)
Pitted keratolysis	Affects people who sweat excessively Patients may complain of damp and excessively smelly feet Usually caused by Corynebacterium Heel and forefoot may become white with clusters of punched-out pits
Palmoplantar pustulosis	Crops of sterile pustules affecting the palms and soles The skin is thickened, red. Scaly and may crack More common in smokers
Juvenile plantar dermatosis	Affects children. More common in atopic patients with a history of eczema Soles become shiny and hard. Cracks may develop causing pain Worse during the summer

Rate question:

Question 46 of 181



A 62-year-old man asks you to look at a lesion on his face:



Image used on license from [DermNet NZ](#) and with the kind permission of Prof Raimo Suhonen



What is the most likely diagnosis?



A. **Keratoacanthoma**

B. Seborrhoeic keratoses

C. Actinic keratosis



D. **Basal cell carcinoma**

E. Pyoderma gangrenosum

This patient should be fast-tracked to exclude a squamous cell carcinoma.

Keratoacanthoma

Keratoacanthoma is a benign epithelial tumour. They are more frequent in middle age and do not become more common in old age (unlike basal cell and squamous cell carcinoma)

Features - said to look like a volcano or crater

- initially a smooth dome-shaped papule
- rapidly grows to become a crater centrally-filled with keratin

Spontaneous regression of keratoacanthoma within 3 months is common, often

Question stats

A	<div style="width: 66.5%;"></div>	66.5%
B	<div style="width: 3.4%;"></div>	3.4%
C	<div style="width: 5.6%;"></div>	5.6%
D	<div style="width: 22.8%;"></div>	22.8%
E	<div style="width: 1.7%;"></div>	1.7%

66.5% of users answered this question correctly

Session score = 30.4%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Keratoacanthoma pictures

resulting in a scar. Such lesions should however be urgently excised as it is difficult clinically to exclude squamous cell carcinoma. Removal also may prevent scarring


Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 47 of 181



A 50-year-old man with a history of ulcerative colitis comes for review. Six years ago he had an ileostomy formed which has been functioning well until now. Unfortunately he is currently suffering significant pain around the stoma site. On examination a deep erythematous ulcer is noted with a ragged edge. The surrounding skin is erythematous and swollen. What is the most likely diagnosis?

- A. Munchausen's syndrome
- B. Irritant contact dermatitis
-  C. **Pyoderma gangrenosum**
- D. Dermatitis artefacta
- E. Stomal granuloma

Question stats

A	0.8%
B	19.4%
C	48.9%
D	2.3%
E	28.6%

48.9% of users answered this question correctly

Session score = 31.9%

Pyoderma gangrenosum is associated with inflammatory bowel disease and may be seen around the stoma site. Treatment is usually with immunosuppressants as surgery may worsen the problem

A differential diagnosis would be malignancy and hence lesions should be referred for specialist opinion to evaluate the need for a biopsy. Irritant contact dermatitis is common but would not be expected to cause such a deep ulcer.

Pyoderma gangrenosum

Features

- typically on the lower limbs
- initially small red papule
- later deep, red, necrotic ulcers with a violaceous border
- may be accompanied systemic symptoms e.g. Fever, myalgia

Causes*

- idiopathic in 50%
- inflammatory bowel disease: ulcerative colitis, Crohn's
- rheumatoid arthritis, SLE
- myeloproliferative disorders
- lymphoma, myeloid leukaemias
- monoclonal gammopathy (IgA)
- primary biliary cirrhosis

Management

- the potential for rapid progression is high in most patients and most doctors advocate oral steroids as first-line treatment
- other immunosuppressive therapy, for example ciclosporin and infliximab, have a role in difficult cases

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of pyoderma gangrenosum

[DermNet NZ](#)

Stoma skin problems

*note whilst pyoderma gangrenosum can occur in diabetes mellitus it is rare and is generally not included in a differential of potential causes

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 48 of 181



A 50-year-old man presents with shiny, flat-topped papules on the palmar aspect of the wrists. He is mainly bothered by the troublesome and persistent itching. A diagnosis of lichen planus is suspected. What is the most appropriate treatment?



- A. Refer for punch biopsy
- B. Emollients + oral antihistamine
- C. Topical dapsone
- D. Topical clotrimazole
- E. Topical clobetasone butyrate

Question stats

A	15.1%
B	13.3%
C	14%
D	5.3%
E	52.3%

52.3% of users answered this question correctly

Session score = 31.3%

Lichen planus

Lichen planus is a skin disorder of unknown aetiology, most probably being immune mediated

Features

- itchy, papular rash most common on the palms, soles, genitalia and flexor surfaces of arms
- rash often polygonal in shape, 'white-lace' pattern on the surface (Wickham's striae)
- Koebner phenomenon may be seen (new skin lesions appearing at the site of trauma)
- oral involvement in around 50% of patients
- nails: thinning of nail plate, longitudinal ridging

Lichenoid drug eruptions - causes:

- gold
- quinine
- thiazides

Management

- topical steroids are the mainstay of treatment
- extensive lichen planus may require oral steroids or immunosuppression

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Picture of lichen planus

[DermNet NZ](#)

Picture of Wickham's striae

Question 49 of 181


A 24-year-old woman presents due to a rash on her neck and forehead. She returned from a holiday in Cyprus 1 week ago and had her hair dyed 2 days ago. On examination there is a weepy, vesicular rash around her hairline although the scalp itself is not badly affected. What is the most likely diagnosis?

- A. Cutaneous leishmaniasis
- B. Irritant contact dermatitis
- ✓ C. Allergic contact dermatitis
- D. Syphilis
- E. Photocontact dermatitis

Question stats

A		2.3%
B		41.4%
C		44.2%
D		0.2%
E		12%

44.2% of users answered this question correctly

Session score = 32.7%

Contact dermatitis

There are two main types of contact dermatitis

- irritant contact dermatitis: common - non-allergic reaction due to weak acids or alkalis (e.g. detergents). Often seen on the hands. Erythema is typical, crusting and vesicles are rare
- allergic contact dermatitis: type IV hypersensitivity reaction. Uncommon - often seen on the head following hair dyes. Presents as an acute weeping eczema which predominately affects the margins of the hairline rather than the hairy scalp itself. Topical treatment with a potent steroid is indicated

Cement is a frequent cause of contact dermatitis. The alkaline nature of cement may cause an irritant contact dermatitis whilst the dichromates in cement also can cause an allergic contact dermatitis

Rate question:

RCGP curriculum



15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 50 of 181


A 72-year-old man complains of a skin lesion on his trunk. On examination it has the typical appearance of a seborrhoeic keratosis. Which one of the following management options is least suitable?

- A. Cryosurgery
-  B. Reassurance about benign nature
- C. Shave biopsy
- D. Curettage
-  E. Excision

Scalpel excision is not usually performed on seborrhoeic keratoses due to the success of other simpler methods.

Seborrhoeic keratoses

Seborrhoeic keratoses are benign epidermal skin lesions seen in older people.






Features

- large variation in colour from flesh to light-brown to black
- have a 'stuck-on' appearance
- keratotic plugs may be seen on the surface

Management

- reassurance about the benign nature of the lesion is an option
- options for removal include curettage, cryosurgery and shave biopsy

Rate question:
Question stats

A		12.5%
B		15.7%
C		18.3%
D		6.4%
E		47.1%

47.1% of users answered this question correctly

Session score = 32%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Seborrhoeic keratoses

Question 1 of 131



You review a 24-year-old woman. Six days ago she developed a pink, itchy rash over her torso and arms. The following day she started to take loratidine 10mg od but this has only led to a slight improvement in her symptoms. On review today she has a widespread urticarial rash which is extremely itchy. There is no lip or tongue swelling, her chest is clear and vital signs are unremarkable. What is the most appropriate next step in management?

- A. Refer for allergy testing
- B. Prescribe topical hydrocortisone to relieve the itch
- C. Switch to cetirizine 10mg od
- ✓ D. **Start a five day course of oral prednisolone**
- E. Increase loratidine to 10mg bd

Question stats

A	<div></div>	5.9%
B	<div></div>	11.1%
C	<div></div>	14.2%
D	<div></div>	61.9%
E	<div></div>	6.9%

61.9% of users answered this question correctly

Session score = 100%

Urticaria

Urticaria describes a local or generalised superficial swelling of the skin. The most common cause of urticaria is allergy although non-allergic causes are seen.

Features

- pale, pink raised skin. Variously described as 'hives', 'wheals', 'nettle rash'
- pruritic

Management

- non-sedating antihistamines are first-line
- prednisolone is used for severe or resistant episodes

Rate question:

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

Question 2 of 131



A 27-year-old woman who is 34 weeks pregnant presents with an itchy, blistering rash over her abdomen. Initially she had a red rash around her umbilicus but it later spread.



Image used on license from [DermNet NZ](#)

What is the most likely diagnosis?

- ☒ A. Pemphigoid gestationis
- ☐ B. Seborrhoeic dermatitis
- ☒ C. Polymorphic eruption of pregnancy
- ☐ D. HELLP syndrome
- ☐ E. Pompholyx

Question stats

A	<div style="width: 64.3%;"></div>	64.3%
B	<div style="width: 0.3%;"></div>	0.3%
C	<div style="width: 34.1%;"></div>	34.1%
D	<div style="width: 0.3%;"></div>	0.3%
E	<div style="width: 1%;"></div>	1%

64.3% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Polymorphic eruption of pregnancy

[DermNet NZ](#)

Pemphigoid gestationis

Skin disorders associated with pregnancy

Polymorphic eruption of pregnancy

- pruritic condition associated with last trimester
- lesions often first appear in abdominal striae
- management depends on severity: emollients, mild potency topical steroids and oral steroids may be used

Pemphigoid gestationis

- pruritic blistering lesions
- often develop in peri-umbilical region, later spreading to the trunk, back, buttocks and arms
- usually presents 2nd or 3rd trimester and is rarely seen in the first pregnancy
- oral corticosteroids are usually required

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#)[CME](#) [Find NZ dermatologist](#) [News](#) [About us](#)[Contact us](#) [Glossary](#)

[Home](#) | [Skin signs and systemic disease](#)

Acanthosis nigricans

What is acanthosis nigricans?

Acanthosis nigricans (AN) is a skin disorder characterised by darkening ([hyperpigmentation](#)) and thickening (hyperkeratosis) of the skin, occurring mainly in the folds of the skin in the armpit (axilla), groin and back of the neck.

Acanthosis nigricans is not a skin disease per se but a cutaneous sign of an underlying condition or disease.

There are two important types of acanthosis: benign and malignant. Although classically described as a sign of internal malignancy, this is very rare. Benign types, sometimes described as ‘pseudoacanthosis nigricans’ are much more common.

What causes acanthosis nigricans?

The cause for acanthosis nigricans is still not clearly defined but it appears to be related to insulin resistance. It has been associated with various benign and malignant conditions. Based on the pre-disposing conditions, acanthosis nigricans has been divided into 7 types.

Types of acanthosis nigricans (AN)	
Type	Characteristics
Obesity-associated acanthosis nigricans	<ul style="list-style-type: none">• Most common type of AN• May occur at any age but more common in adulthood• Obesity often caused by insulin resistance
Syndromic	<ul style="list-style-type: none">• Defined as AN that is associated with a syndrome, e.g. hyperinsulinaemia, Cushing's

acanthosis nigricans

[syndrome](#), [polycystic ovary syndrome](#), [total lipodystrophy](#)

Benign acanthosis nigricans

- Also referred to as acral acanthotic anomaly
- Thick velvety lesion most prominent over the upper surface of hands and feet in patients who are in otherwise good health
- Most common in dark-skinned people, especially those of African American descent

Drug-induced acanthosis nigricans

- Uncommon, but AN may be induced by several medications, including nicotinic acid, insulin, systemic corticosteroids and hormone treatments

Hereditary benign acanthosis nigricans

- AN inherited as an autosomal dominant trait
- Lesions may manifest at any age, infancy, childhood or adulthood

Malignant acanthosis nigricans

- AN associated with internal malignancy
- Most common underlying cancer is tumour of the gut (90%) especially stomach cancer
- In 25-50% of cases, lesions are present in the mouth on the tongue and lips

Mixed-type acanthosis nigricans

- Patients with one type of AN whom also develop new lesions of a different cause, e.g. overweight patient with obesity-associated AN who then develops malignant AN

What are the features of acanthosis nigricans?

- Thickened brown velvety textured patches of skin that may occur in any location but most commonly appear in the folds of the skin in the armpit, groin and back of the neck.
- Papillomatosis (multiple finger-like growths) is common on cutaneous and mucosal surfaces.
- Skin tags often found in and around affected areas.
- Pruritus (itching) may be present.
- AN lesions may also appear on the mucous membranes of the oral cavity, nasal and laryngeal mucosa and oesophagus.
- Lesions involving the mucosa, palms and soles tends to be more extensive and more severe in malignant AN.
- Patients with malignant AN tend to be middle-aged, not obese and lesions develop abruptly.

Acanthosis nigricans





What is the workup for acanthosis nigricans?

It is very important to differentiate acanthosis nigricans related to malignancy from that related to benign conditions. Tumours in malignant AN are usually very aggressive and spread quickly. Death often occurs soon after. If malignant AN is suspected in a patient without known cancer, it is extremely important to perform a thorough workup for underlying malignancy and identify a hidden tumour. If the tumour can be successfully treated, the condition may resolve.

Other causes of AN may be identified by screening for insulin resistance and diabetes mellitus.

What is the treatment for acanthosis nigricans?

The primary aim of treatment is to correct the underlying disease process. Often correcting the underlying cause results in resolution of the lesions.

- Correct hyperinsulinaemia through diet and medication
- Lose weight with obesity-associated AN
- Excise or treat underlying tumour
- Stop offending medicines in drug-induced AN

In hereditary AN, lesions tend to enlarge gradually before stabilising and/or regressing on their own.

There is no specific treatment for AN. Treatments considered are used primarily to improve cosmetic appearance and include topical retinoids, dermabrasion and laser therapy.

Final outcome of AN varies depending on the cause of AN. Benign conditions either on their own or through lifestyle changes and/or treatment have good outcomes. However, the prognosis for patients with malignant AN is often poor. The associated cancer is often advanced and the average survival of these patients is approximately 2 years.

Related information

On DermNet NZ:

- [Cutaneous markers of internal malignancy](#)
- [Sign of Leser-Trelat](#)
- [Florid cutaneous papillomatosis](#)
- [Skin pigmentation](#)
- [Dowling-Degos disease \(reticulate pigmented anomaly\)](#)

Other websites:

- emedicine dermatology, the online textbook

- [Acanthosis nigricans](#)
- [Paraneoplastic Diseases](#)

Books about skin diseases:

See the [DermNet NZ bookstore](#)

Author: Vanessa Ngan, Staff writer

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 2004. Last updated 12 Feb 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

ALDARA – EFFECTIVE TREATMENT FOR sBCC...
AS AN ALTERNATIVE TO SURGERY



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Skin lesions, tumours and cancers](#)

Basal cell carcinoma

Basal cell carcinoma is also known as *BCC* or *rodent ulcer*. Basal cell carcinoma is the most common type of cancer in humans and is particularly prevalent in the Australia and New Zealand. Luckily, this form of [skin cancer](#) is very rarely a threat to life.

Who is prone to basal cell carcinoma?

BCC typically affects adults of fair complexion who have had a lot of sun exposure, or repeated episodes of [sunburn](#). Although more common in the elderly, sun-loving New Zealanders frequently develop them in their early 40s and sometimes younger.

The tendency to develop BCC may be inherited, and is a particular problem for families with basal cell naevus syndrome ([Gorlin syndrome](#)) or [Bazex syndrome](#).

Types of basal cell carcinoma

BCCs arise in otherwise normal appearing skin, unlike [squamous cell carcinomas](#) (SCCs), which often arise within pre-existing [solar keratoses](#). They usually grow slowly over months or years so they can vary in size from a few millimetres to several centimetres in diameter. There are several different clinical types.

- Most common type on the face
- Small, shiny, skin coloured or pinkish lump
- Blood vessels cross its surface
- May have a central ulcer so its edges appear rolled
- Often bleeds spontaneously then seem to heal over
- Cystic BCC is soft, with jelly-like contents

Nodular BCC

- Rodent ulcer is an open sore
- Micronodular and microcystic types may infiltrate deeply



Superficial BCC

- Often multiple
- Upper trunk and shoulders, or anywhere
- Pink or red scaly irregular plaques
- Slowly grow over months or years
- Bleed or ulcerate easily



Morphoeic BCC

- Also known as sclerosing BCC
- Usually found in mid-facial sites
- Skin-coloured, waxy, scar-like
- Prone to recur after treatment
- May infiltrate cutaneous nerves (perineural spread)



Pigmented BCC

- Brown, blue or greyish lesion
- Nodular or superficial histology
- May resemble [melanoma](#)



Basisquamous BCC

- Mixed basal cell carcinoma (BCC) and squamous cell carcinoma (SCC)
- Potentially more aggressive than other forms of BCC



More images of basal cell carcinoma ...

- [BCC on the face](#)
- [BCC on the nose](#)
- [BCC on the eyelid](#)
- [BCC on the ear](#)
- [BCC on the limbs](#)
- [BCC on the trunk](#)

Treatment of BCC

The treatment for a BCC depends on its type, size and location, the number to be treated, and the preference or expertise of the doctor. Possibilities include:

Superficial skin surgery

Shave, [curettage, & cautery](#) (and other types of minor surgery). Many small, well-defined nodular or superficial BCCs can be successfully removed by removing just the top layers of the skin. The wound usually heals within a few weeks without needing stitches.

Excision biopsy

[Excision](#) means the lesion is cut out and the skin stitched up. This is the most appropriate treatment for nodular, infiltrative and morphoeic BCCs. Very large lesions may require a [flap](#) or [skin graft](#) to repair the defect after excision.

Mohs micrographically controlled excision

[Mohs micrographically controlled excision](#) is a technique used for BCCs growing in high risk areas of the face around the eyes and nose. Ill-defined, morphoeic and recurrent BCCs are also best removed by a dermatologic surgeon by the Mohs technique. This involves examining the carefully marked excised tissue under the microscope while the patient is still in the operating suite, layer by layer. It may take several slices until the tumour has been completely removed. The defect is often much bigger than the BCC appeared to be before surgery because of hidden extensions of tumour cells under the skin.

Photodynamic therapy

[Photodynamic therapy](#) (PDT) refers to a technique in which the tumour is treated with a photosensitising chemical in a cream (e.g. [Metvix](#)) or lotion, and exposed to light several hours later. Up to 85% superficial BCCs are cured by PDT, with excellent cosmetic results. It is less successful for other types of BCC and is best avoided if the tumour is in a high risk site.

Imiquimod cream

[Imiquimod](#) is an immune response modifier. The cream is applied to superficial BCCs three to five times each week, for six to sixteen weeks. The imiquimod results in an inflammatory reaction, maximal at three weeks. Up to 85% of suitable BCCs disappear, with minimal scarring.

Cryotherapy

[Cryotherapy](#) is the treatment of a superficial skin lesion by freezing it. Dermatologists sometimes treat small superficial BCCs with liquid nitrogen, using a special double freeze-thaw technique. A blister forms, crusts over and heals within several weeks. A permanent white mark usually results from this treatment, but it is inexpensive and may be very suitable for lesions in covered sites.

Radiotherapy

[Radiotherapy](#) refers to X-ray treatment, and is less commonly used to treat BCCs than in the past. It may be suitable for skin cancers on the face in the elderly. The best cosmetic results are achieved using multiple fractions, e.g. once-weekly treatments for several weeks.

What happens after treatment?

Whatever the chosen treatment, BCC can nearly always be cured.


- BCCs occasionally recur at the same site, but they can be treated again by the same or a different method. The highest cure rates are obtained by Mohs surgery.
- Metastatic BCC refers to BCC that has spread to the lymph glands and other organs. It is extremely rare but may be ultimately fatal.

Patients with BCC are at increased risk of developing further BCCs. They are also at increased risk of other skin cancers, especially [melanoma](#). Arrange a complete skin examination from time to time. Ask your [dermatologist](#) or GP to check any persisting or growing lumps or sores or otherwise odd-looking skin lesions. Early detection means easier treatment, and less scarring.

[Protect your skin](#) from excessive exposure to the sun. Stay indoors or under the shade in the middle of the day. Wear covering clothing. Apply broad spectrum [sunscreens](#) to exposed skin if you are outdoors for prolonged periods, especially during the summer months.

Related information

References:

-  [Guidelines for the Management of Basal Cell Carcinoma \(NR Telfer, GB Colver, PW Bowers\). BJD, Vol. 159, No.1, July 2008 \(p35\)](#) – British Association of Dermatologists

On DermNet NZ:

- [Dermatological procedures](#)
- [Mohs micrographic surgery](#)
- [Skin lesions](#)
- [Skin cancer](#)
- [Gorlin syndrome](#)
- [Bazex syndrome](#)
- [Basal cell carcinoma](#) – common skin lesions course

Other websites:

- [American College of Mohs Micrographic Surgery and Oncology](#)
- [Mohs Micrographic Surgery](#) from Johns Hopkins Oncology Center
- [Basal cell carcinoma](#): emedicine dermatology, the on-line medical reference textbook.
- [Basal cell carcinoma](#) – British Association of Dermatologists

Books about skin diseases:

See the [DermNet NZ bookstore](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1997. Last updated 27 Feb 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Immunological disorders](#)

Bullous pemphigoid

Bullous pemphigoid is a blistering skin disease which usually affects middle aged or elderly persons. It is an immunobullous disease, i.e. the blisters are due an immune reaction within the skin.

What does it look like?

Characteristically, crops of tense, fluid-filled blisters develop. They may arise from normal-looking or red patches of skin, and the blisters may be filled with clear, cloudy or blood-stained fluid. Bullous pemphigoid is usually very itchy. It may be localized to one area but is more often widespread, often favouring body folds. In severe cases, there may be blisters over the entire skin surface as well as [blisters inside the mouth](#).

Prior to blistering, the red itchy patches may be thought to be a kind of [dermatitis](#) or [urticaria](#).

When the blisters heal up, they may leave brown marks ([postinflammatory pigmentation](#)) and/or tiny [cysts](#) called [milia](#) but these usually disappear within a few months.





Bullous pemphigoid

[More images of bullous pemphigoid ...](#)

How is the diagnosis made?

A dermatologist can often make the diagnosis by examining the skin carefully. In most cases the diagnosis will be confirmed by a [skin biopsy](#) of a typical blister. Under the microscope, the pathologist can see a split between the outside layer of the skin, the epidermis, and the inside layer, the dermis. Direct immunofluorescence staining highlights antibodies along the basement membrane that lies between the epidermis and dermis.

What causes bullous pemphigoid?

Bullous pemphigoid is thought to occur because IgG immunoglobulins (antibodies) and activated T lymphocytes (white blood cells) attack components of the basement membrane, particularly a protein known as the BP antigen BP180, or less frequently BP230. These proteins are within the NC16A domain of collagen XVII. BP180 is also called Type XVII collagen. These are associated with the hemidesmosomes, structures that ensure the epidermal keratinocyte cells stick to the dermis to make a waterproof seal. The 'autoimmune' reaction to these proteins can be thought of as a type of allergy to one's own skin.

In many patients, skin antibodies can also be detected circulating in the blood stream (positive indirect immunofluorescence).

What is the treatment?

If the pemphigoid is very widespread, hospital admission may be advised so the blisters and raw areas can be expertly dressed. Antibiotics may be required for secondary bacterial infection.

Most patients with bullous pemphigoid are treated with [steroid](#) tablets, usually prednisone. The dose is adjusted until the blisters have stopped appearing, which usually takes several weeks. The dose of prednisone is then slowly reduced over many months or years. As systemic steroids have many undesirable side effects, other medications are added to ensure the lowest possible dose (aiming for 5 to 10mg prednisone daily). These other medications may include:


- [Topical steroids](#) (usually clobetasol propionate)
- [Tetracycline](#) antibiotics
- Nicotinamide
- [Dapsone](#)
- [Azathioprine](#)
- [Methotrexate](#)
- [High dose intravenous immunoglobulin](#)

Treatment is usually needed for several years. In most cases the pemphigoid eventually completely clears up and the treatment can be stopped.

If you have pemphigoid, make sure you understand your treatment - do not alter it without consulting your dermatologist or general practitioner.

Related information

References:

-  [Guidelines for the Management of Bullous Pemphigoid \(F Wojnarowska, G Kirtschig, AS Highet, VA Vening, NP Khumalo\) BJD, Vol. 147, No. 2, August 2002 \(p214-221\) – British Association of Dermatologists](#)

On DermNet NZ:

- [Blistering skin diseases](#)
- [Cicatricial pemphigoid](#)
- [Epidermolysis bullosa acquisita](#)
- [Oral blistering diseases](#)

Other websites:

- [International Pemphigus & Pemphigoid Foundation](#)
- [Bullous pemphigoid](#) – emedicine dermatology, the online textbook
- [Pemphigoid](#) – British Association of Dermatologists

Books about skin diseases:

See the [DermNet NZ bookstore](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1997. Last updated 27 Feb 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Immunological disorders](#)

Dermatitis herpetiformis

Dermatitis herpetiformis (also known as 'DH') is a rare but persistent immunobullous skin condition related to coeliac disease. It affects young adults; two thirds of patients are male. There is a genetic predisposition.

'Immunobullous' means it is a blistering condition caused by an abnormal immunological reaction. All forms of coeliac disease involve IgA antibodies and intolerance to the gliaden fraction of gluten found in wheat; the precise reaction has not been identified.

Eighty percent of patients with dermatitis herpetiformis also have gluten enteropathy, which is the most common type of coeliac disease. There is an association with thyroid disease in one third.

Clinical features

Dermatitis herpetiformis characteristically affects the scalp, buttocks, elbows and knees but lesions may arise on any area of skin. Extremely itchy bumps ([prurigo](#) papules) and blisters (vesicles) up to 1 cm in diameter arise on normal or reddened skin. The severity can vary from week to week but it rarely clears up without specific treatment.

Dermatitis herpetiformis





Gluten enteropathy

Gluten enteropathy may affect children and adults. It is characterised by villous atrophy. This means that instead of being highly convoluted, the lining of the intestines is smooth and flattened. The result is poor or very poor absorption of nutrients. The patient may feel well or develop the following symptoms:

- Tiredness (80%)
- Abdominal discomfort and bloating (75%)
- Weight loss (30%)
- Constipation (30%) or diarrhoea (50%)
- Pale stools that float on the surface of the toilet pan
- Bone fractures due to osteoporosis

Other associated conditions

The range of conditions less commonly induced by gluten also includes:

- Neurological problems including ataxia (loss of balance), polyneuropathy, epilepsy
- Heart problems including pericarditis and cardiomyopathy
- Thin dental enamel
- Recurrent abortions (miscarriage)
- Fatty liver resulting in abnormal liver function
- Aphthous ulcers

Patients with coeliac disease sometimes suffer from other autoimmune conditions possibly associated with gluten intolerance. These include insulin-dependent diabetes mellitus, thyroiditis, autoimmune hepatitis, Sjögren's syndrome, [Addison's disease](#), atrophic gastritis and [alopecia areata](#).

They may also be affected by conditions that are not related to gluten intolerance. These include IgA deficiency, [psoriasis](#), [Down syndrome](#) and primary biliary cirrhosis.

Non-Hodgkin's lymphoma, affecting the intestines or any part of the body, is a serious complication of gluten enteropathy but is fortunately rare, affecting less than 1% of patients.

Laboratory findings

Although dermatologists may suspect the diagnosis from the clinical appearance, a [skin biopsy](#) is usually necessary to confirm it. The microscopic appearance of dermatitis herpetiformis is characteristic.

- The blister is subepidermal (it forms underneath the epidermis)
- The inflammatory cells (neutrophils and eosinophils) group in the dermal papillae
- Direct immunofluorescence reveals IgA immunoglobulin in dermal papillae

The results of blood tests are usually normal but some patients have the following abnormalities, due to gluten enteropathy:

- Mild anaemia
- Folic acid deficiency
- Iron deficiency

Specific autoantibody tests are available to confirm the diagnosis.

- Antiendomysial antibodies (IgA)
- Tissue transglutaminase antibody (IgA)
- Deamidated gliadin peptide antibody (dGP, IgA and IgG)
- Gliadin assay (IgA and IgG)

Borderline results may be difficult to interpret.

Other tests may include:

- Total IgA
- Histocompatibility antigen typing: HLA-DR3 and DQw2 are present in most patients with coeliac disease. About 5% of those with HLA-DQ are affected by one form or other of coeliac disease
- Small bowel biopsy

The bowel may appear normal because of treatment (medicine or restricted intake of gluten), because there are skip lesions (the sample was taken from an unaffected site) or the intestine may be unaffected by the disease.

Treatment

The medication of choice is [dapsone](#), which considerably reduces the itch within a day or two. The dose required varies from 50 mg to 300 mg daily; refer to DermNet's page about dapsone for potential side effects and monitoring requirements.

For those intolerant or allergic to dapsone, the following may be useful:

- Ultrapotent [topical steroids](#)
- [Systemic steroids](#)
- Sulfapyridine (not available in New Zealand).

A strict gluten-free diet is strongly recommended.

- It reduces the requirement for dapsone
- It improves associated gluten enteropathy
- It enhances nutrition and bone density
- It may reduce the risk of developing other autoimmune conditions
- It probably reduces the risk of intestinal lymphoma.

Related information

Other websites:

- [Manufactured Food Database](#) (NZ) for gluten free diet
- [NZ Coeliac Society](#)
- [Gluten Intolerance Group of North America](#)

- [Dermatitis herpetiformis](#) – emedicine dermatology, the online textbook
- [Dermatitis Herpetiformis](#) – British Association of Dermatologists

Author: DermNet Editorial team
Department of Dermatology, Health Waikato.

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 2001. Last updated 19 Aug 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).

search string

by alphabet

*	A	B	C	D	E	F
G	H	I	J	K	L	M
N	O	P	Q	R	S	T
U	V	W	X	Y	Z	

by localization

AIDS-Related Complex, Kaposi's Sarcoma



copyright 1996 - 2011 DermIS

image description

diagnosis	localization	lesions	additional descriptions
AIDS-Related Complex		node	
Kaposi's Sarcoma		node	

patient information

patient sex: ♂ male

related



Previous Image Next Image
more information about this
diagnose

AIDS-Related Complex (9)

Kaposi's Sarcoma (14)

differential diagnoses

Atypical Mycobacterial
Infection (19)

Lichen Scrofulosorum (1)

Tuberculosis Miliaris

Ulcerosa Cutis et Mucosae (0)

Histoplasmosis (0)

Varicella (21)

Zoster Generalisatus (1)

Zoster Gangraenosus (6)

Herpes Simplex Genitalis (8)

Herpes Simplex (23)

Herpes Simplex Generalisatus
(0)

Herpes Simplex Labialis (4)

Oral Hairy Leukoplakia (2)

Molluscum Contagiosum (18)

Epidermodysplasia
Verruciformis (1)

Condyloma Acuminatum (14)

Cytomegaly (0)

Secondary Lues (37)

Tinea Capitis Profunda (4)

Tinea Barbae Profunda (4)

Deep Mycoses (0)

Candidosis of Mouth (8)

Cryptococcosis (0)

Candida Onychomycosis and
Paronychia (3)

Chronic Mucocutaneous
Candidosis (4)

Granuloma Candidomycetica
(3)

Toxoplasmosis (3)

Scabies (23)

Scabies Norvegica (0)

Behçet's Disease (9)

Kaposi's Sarcoma (14)

Angiosarcoma (4)
Ulcus Terebrans (9)
Skin Metastases of Melanoma / Skin Tumours (10)
Lymphoma, B-Cell (21)
Centroblastic-Centrocytic Lymphoma (7)
Angiokeratoma Corporis Circumscriptum (Fabry) (5)
Chronic Recurrent Aphthae (16)
Sterile Eosinophilc Pustulosis (3)
Furunculosis (2)
Granuloma Pyogenicum (11)
Ecthyma Simplex (5)
Seborrheic Dermatitis (8)
Hypereosinophilic Dermatitis (7)
Hypereosinophilic Syndrome (5)
Drug Eruption, Oral Mucosa (3)
Fixed Drug Eruption (7)
Psoriasis Vulgaris, Chronic Stationary Type (60)
Psoriasis Vulgaris, Guttate Type (22)
Miliaria Rubra (4)
Steroid Acne (2)
Ichthyosis Acquisita (0)
Lepra Lepromatosa (1)
AIDS-Related Complex (9)
Granuloma Candidomycetica (3)
Chromomykosis (0)
Sarcoidosis, Large Nodular Type (8)
Lymphangiosarcoma (4)
Angiosarcoma (4)
Acrolentiginous Melanoma (ALM) (37)
Nodular Melanoma (NM) (12)
Merkel Cell Carcinoma (4)
Skin Metastases of Melanoma / Skin Tumours (10)
Non-Hodgkin Lymphoma (0)
Lymphoma, B-Cell (21)
Pleomorphic T-Cell Lymphoma (6)
Pleomorphic T-Cell Lymphoma (Large Cell) (1)
Centroblastic-Centrocytic Lymphoma (7)
Immunoblastic Lymphoma (4)
Angio-Endotheliomatosis

Proliferans Systematica (0)
Leukaemia, Specific Skin Lesions (12)
Mucous Granuloma (3)
Dermatofibroma (13)
Lymphocytoma (13)
Hemangioma (39)
Angiolymphoid Hyperplasia with Eosinophilia (3)
Hemangioma Racemosum (5)
Angiokeratoma Corporis Circumscriptum (Fabry) (5)
Corona Phlebectatica (4)
Acroangiodermatitis Mali (7)
Cystic Sialadenoma (1)
Granuloma Pyogenicum (11)
Stasis Dermatitis (6)
Amalgam Tattoo (1)
Facial Granuloma with Eosinophilia (6)

search string

by alphabet

*	A	B	C	D	E	F
G	H	I	J	K	L	M
N	O	P	Q	R	S	T
U	V	W	X	Y	Z	

by localization

Livedo Reticularis



copyright 1996 - 2011 DermIS

image description

diagnosis	localization	lesions	additional descriptions
Livedo Reticularis			vessel changes*

patient information

patient sex: ♂ male
patient age: 55
patient race: caucasian

related



Previous Image



Next Image

more information about this diagnose

Livedo Reticularis (27)

differential diagnoses

Panarteritis Nodosa
Kussmaul-Maier (15)

Drug Eruption (43)

Systemic Lupus
Erythematosus (23)

Congenital Dyskeratosis (8)

Cutis Marmorata (3)

Cutis Marmorata
Telangiectatica Congenita (1)

Livedoid Vasculitis (5)

Pseudoleucoderma
Angiospasticum (0)

Calciphylaxis (0)

Buschke's Heat Melanosis (6)

search string

by alphabet

*	A	B	C	D	E	F
G	H	I	J	K	L	M
N	O	P	Q	R	S	T
U	V	W	X	Y	Z	

by localization

Myxoedema, Pretibial



copyright 1996 - 2011 DermIS

image description

diagnosis	localization	lesions	additional descriptions
Myxoedema, Pretibial			

patient information

patient sex: ♀ female

related



Previous Image Next Image
more information about this
diagnose

Myxoedema, Pretibial (4)

differential diagnoses

- Lipoedema (1)
- Elephantiasis, Idiopathic (0)
- Elephantiasis Nostras
following recidiv. Erysipelas
(1)
- Chronic Venous
Insufficiency, Grade II (9)
- Eosinophilic Fasciitis (0)
- Lymphoedema (12)
- Pachydermoperiostosis (0)











DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-ZCME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Vascular skin problems](#)

Erythema ab igne

What is erythema ab igne?

Erythema ab igne (EAI) is a skin reaction caused by chronic exposure to infrared radiation in the form of heat. It was once a common condition seen in the elderly who stood or sat closely to open fires or electric space heaters. Although the introduction of central heating has reduced EAI of this type, it is still found in individuals exposed to heat from other sources.

What are the signs and symptoms and who is at risk?

Limited exposure to heat, insufficient to cause a direct burn, causes a mild and transient red rash resembling lacework or a fishing net. Prolonged and repeated exposure causes a marked redness and colouring of the skin (hyper- or hypopigmentation). The skin and underlying tissue may start to thin (atrophy) and rarely sores may develop. Some patients may complain of mild itchiness and a burning sensation.

Erythema ab igne





Localised lesions seen today reflect the different sources of heat that people may be exposed to. Examples include:

- Repeated application of hot water bottles or heat pads to treat chronic pain, e.g. chronic backache
- Repeated exposure to car heaters or furniture with built-in heaters
- Occupational hazard for silversmiths and jewellers (face exposed to heat), bakers and chefs (arms)

What treatments are available?

The source of chronic heat exposure must be avoided. If the area is only mildly affected with slight redness, the condition will resolve by itself over several months. If the condition is severe and the skin pigmented and atrophic, resolution is unlikely. In this case, there is a possibility that squamous cell carcinomas may form. If there is a persistent sore that doesn't heal or a growing lump within the rash, a skin biopsy should be performed to rule out the possibility of skin cancer. Abnormally pigmented skin may persist for years. Treatment with topical tretinoin or laser may improve the appearance.

Related information

References:

- Book: Textbook of Dermatology. Ed Rook A, Wilkinson DS, Ebling FJB, Champion RH, Burton JL. Fourth edition. Blackwell Scientific Publications.

On DermNet NZ:

Other websites:

- [Erythema ab igne](#) – emedicine dermatology, the online textbook

Books about skin diseases:

See the [DermNet NZ bookstore](#)

Author: Vanessa Ngan, staff writer

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 2003. Last updated 15 Jun 2009 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Skin reactions to external agents](#)

Erythema multiforme

What is erythema multiforme?

Erythema Multiforme (EM) is a hypersensitivity reaction usually triggered by infections, most commonly [herpes simplex virus](#) (HSV). It presents with a skin eruption characterised by a typical target (iris) lesion. There may be mucous membrane involvement. It is acute and self-limiting, usually resolving without complications.

Erythema multiforme is divided into major and minor forms and is now regarded as probably distinct from [Stevens Johnson Syndrome \(SJS\)](#) and [Toxic Epidermal Necrolysis \(TEN\)](#).

Who gets erythema multiforme?

Erythema multiforme most commonly affects young adults (20-40 years of age), however all age groups can be affected. There is a male predominance but no racial bias.

There is a genetic tendency to EM. Certain tissue types are more often found in people with herpes-associated EM (HLA-DQw3) and recurrent EM (HLA-B15, -B35, -A33, -DR53, -DQB1*0301).

What triggers it?

Infections

Infections are probably associated with at least 90% of cases of EM.

The single most common trigger for developing EM is [herpes simplex](#) virus (HSV) infection, usually herpes labialis (cold sore on the lip) and less often [genital herpes](#). HSV type 1 is more commonly associated than type 2. The herpes

infection usually precedes the skin eruption by 3-14 days.

Mycoplasma pneumonia (a lung infection caused by *Mycoplasma pneumoniae*) is the next most common trigger.

Many different virus infections have been reported to trigger EM including:

- Parapoxvirus ([orf](#) and [milkers' nodules](#))
- Herpes varicella zoster ([chickenpox](#), [shingles](#))
- Adenovirus
- [Hepatitis viruses](#)
- [Human immunodeficiency virus](#) (HIV)
- Cytomegalovirus
- Viral [vaccines](#)

Dermatophyte fungal infections ([tinea](#)) have also been reported in association with EM.

Drugs

Medications are probably an uncommon cause (<10%) of EM. If this diagnosis is being seriously considered then alternative drug eruptions should be excluded such as [SJS/TEN](#), generalised [fixed drug eruption](#), polymorphic exanthematous drug eruption and [urticaria](#).

Many drugs have been reported to trigger EM including barbiturates, non-steroidal anti-inflammatory drugs, penicillins, sulphonamides, phenothiazines and [anticonvulsants](#).

Clinical features

General symptoms

There are usually no prodromal symptoms (EM minor). However, sometimes with EM major there may be mild symptoms such as fever or chills, weakness or painful joints.

Skin lesions

Few to hundreds of skin lesions erupt within a 24-hour period. The lesions are first seen on the backs of hands and/or tops of feet, then spread along the limbs towards the trunk. The upper limbs are more commonly affected than the lower. Palms and soles may be involved. The face, neck and trunk are common sites. Skin lesions are often grouped on elbows and knees. There may be an associated mild itch or burning sensation.

The initial lesions are sharply demarcated, round, red/pink and flat (macules) which become raised (papules/palpable) and gradually enlarge to form plaques (flat raised patches) up to several centimetres in diameter. The centre of the papule/plaque darkens in colour and develops surface (epidermal) changes such as blistering or crusting. Lesions usually evolve over 72 hours.

The typical target (iris) lesion of EM has a sharp margin, regular round shape and three concentric colour zones:

- Centre is dusky or dark red with a blister or crust
- Next ring is a paler pink and is raised due to oedema (fluid swelling)
- Outermost ring is bright red.

Atypical targets show just 2 zones and/or an indistinct border.

The eruption is polymorphous (many forms), hence the 'multiforme' in the name. Lesions may be at various stages of

development with both typical and atypical targets present at the same time. A full skin examination may be required to find typical targets as these may be few in number.

Lesions show the Köbner (isomorphic) phenomenon, meaning they can develop at sites of preceding (but not concurrent or subsequent) skin trauma.

There is no associated swelling of face, hands or feet, despite these being common sites of rash distribution. However the lips are often swollen, especially in EM major.

Erythema multiforme



[More pictures of EM...](#)

Mucous membrane involvement

Mucosal lesions, if present, typically develop a few days after the skin rash begins.

In EM minor, mucous membrane involvement is absent or mild. Mucosal changes, if present, consist initially of redness of the lips and inside cheek. Sometimes blisters develop and quickly break to form erosions and ulcers.

In EM major, one or more mucous membranes are typically affected, most often the oral mucosa:

- most commonly lips, inside the cheeks, tongue
- less commonly floor of the mouth, palate, gums.

Other mucosal sites affected may include:

- eye
- anus and genitals
- trachea/bronchi
- gastrointestinal tract.

Mucosal lesions consist of swelling and redness with blister formation. The blisters break quickly to leave large, shallow, irregular shaped, painful ulcers that are covered by a whitish pseudomembrane. Typically the lips are swollen with haemorrhagic crusts. The patient may have difficulty speaking or swallowing due to pain.

With mycoplasma pneumonia, the mucous membranes may be the only affected sites (mucositis). This can be severe and require hospitalization due to difficulty eating and drinking. Whether this is a limited form of EM has not been determined.

Erythema multiforme: mucosal involvement



Recurrent EM

Erythema Multiforme can be recurrent with multiple episodes per year for many years. This is believed to be nearly always due to HSV-1 infection.

How is the diagnosis made?

Erythema multiforme is a clinical diagnosis although [skin biopsy](#) may be required to exclude other conditions. The histology of EM is characteristic but not diagnostic. It varies with the age of the lesion, its appearance, and which part is biopsied.

Other tests may be done looking for infections commonly seen in association with EM such as for *Mycoplasma pneumoniae*.

For more detail, see: [Erythema multiforme: histology & mechanisms](#).

Treatment of erythema multiforme

For the majority of cases, no treatment is required as the rash settles by itself over several weeks without complications.

Treatment directed to any possible cause may be required such as oral [aciclovir](#) (not topical) for HSV or [antibiotics](#) (e.g. [erythromycin](#)) for *Mycoplasma pneumoniae*. If a drug cause is suspected then the possible offending drug should be ceased.

Supportive/symptomatic treatment may be necessary.

- Itch – oral [antihistamines](#) and/or [topical corticosteroids](#) may help.
- Oral pain – mouthwashes containing [local anaesthetic](#) and [antiseptic](#) reduce pain and secondary infection.
- Eye involvement should be assessed and treated by an ophthalmologist.
- EM major may require hospital admission for supportive care, particularly if severe oral involvement restricts drinking.

The role of [oral corticosteroids](#) remains controversial as no controlled studies have shown any benefit. However for severe disease 0.5-1mg/kg/d prednis(ol)one is often used early in the disease process.

Recurrent EM is usually treated initially with continuous oral [aciclovir](#) for 6 months at a dose of 10mg/kg/d in divided doses (e.g., 400mg twice daily), even if HSV has not been an obvious trigger for the patient's EM. This has been shown to be effective in placebo-controlled double blind studies. However EM may recur when the aciclovir is ceased. Other antiviral drugs such as valciclovir (500-1000mg/d) and famciclovir (250mg twice daily) should be tried if aciclovir has not helped; these drugs are not readily available in New Zealand.

Other treatments (used continuously) that have been reported to help suppress recurrent EM include:

- [Dapsone](#) 100-150mg/d
- Antimalarial drugs eg [hydroxychloroquine](#)
- [Azathioprine](#) 100-150 mg/d
- Others - [thalidomide](#), [ciclosporin](#), [mycophenolate mofetil](#), photochemotherapy ([PUVA](#)).

What is the outlook?

Erythema multiforme usually resolves spontaneously without scarring over 2-3 weeks for the EM minor form, and up to 6 weeks for EM major. EM does not progress to SJS/TEN.

There may be residual mottled skin discolouration. Significant eye involvement in EM major may result in [serious eye problems](#) including blindness, as seen with SJS/TEN.

Related information

References:

- Al-Johani KA, Fedele S, Porter SR. Erythema multiforme and related disorders. Oral Surg. Oral Med. Oral Pathol. Oral Radiol. Endod. 2007; 103: 642-54.
- Auquier-Dunant A, Mockenhaupt M, Naldi L, Correia O, Schröder W, Roujeau J-C, for the SCAR Study Group. Correlations between clinical patterns and causes of erythema multiforme majus, Stevens-Johnson syndrome, and toxic epidermal necrolysis. Results of an international prospective study. Arch. Dermatol. 2002; 138: 1019-24.
- French LE, Prins C. Erythema multiforme, Stevens-Johnson syndrome and toxic epidermal necrolysis. In Bologna second edition
- Lamoreux MR, Sternbach MR, Hsu WT. Erythema multiforme. Am. Fam. Physician 2006; 74: 1883-8.
- Schalock PC, Dinulos JGH, Pace N, Schwarzenberger K, Wenger JK. Erythema multiforme due to Mycoplasma pneumoniae infection in two children. Pediatr. Dermatol. 2006; 23: 546-55.

On DermNet NZ:

- [Erythema multiforme: histology and mechanisms](#)
- [Dermatological emergencies online course](#)
- [Bullous drug eruptions](#)
- [Drug eruptions](#)

Other websites:

- [Erythema multiforme and toxic epidermal necrolysis](#) – Grand Round from Baylor College of Medicine
- [Erythema multiforme](#) – emedicine dermatology, the online textbook
- [Erythema multiforme](#) – British Association of Dermatologists

Books about skin diseases:

See the [DermNet NZ bookstore](#)

Author: In 2009, Dr Delwyn Dyal-Smith updated an original article written by Dr Amanda Oakley.

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1997. Last updated 14 Feb 2011 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our

[disclaimer and copyright policy.](#)



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Vascular skin problems](#)

Erythema nodosum

Erythema nodosum is a skin condition where red lumps form on the shins, and less commonly the thighs and forearms. It is a type of [panniculitis](#).

Erythema nodosum



[More images of erythema nodosum ...](#)

Three to six women are affected for each man with erythema nodosum (EN). However the sex incidence before puberty is about equal. Most cases occur between the ages of 20 and 45, with a peak from 20 to 30. EN occurs occasionally in the elderly and in children.

Causes

EN appears to be a hypersensitivity reaction with a number of different causes.

Common causes in New Zealand are:

- **Throat infections;** these may be due to [streptococcus](#), or viral in origin.

- Sarcoidosis**; EN is often associated with enlargement of the lymph nodes (bilateral lymphadenopathy) in the lungs in [sarcoidosis](#). This is known as Löfgren's syndrome. It may result in a dry cough or some shortness of breath.
- **Tuberculosis (TB)**; EN occurs with the primary infection with [TB](#). TB in New Zealand is currently uncommon.
 - **Pregnancy or the oral contraceptive pill**; EN may occur after the first 2 or 3 cycles on the pill. EN may occur in pregnancy, clear after delivery, then recur in subsequent pregnancies.
 - **Other drugs**; other drugs which can cause EN include: sulphonamides, salicylates, other [nonsteroidal anti-inflammatory drugs \(NSAIDs\)](#), bromides, [iodides](#) and gold salts.
 - **Other causes**; there are many other causes of EN but these are uncommon in New Zealand.

Clinical presentation of EN

EN may be preceded by an upper respiratory infection 7-14 days beforehand or by a longer period of feeling "below par", loss of weight and cough. Other symptoms depend on the cause of the EN.

Joint aches occur in over half of cases regardless of cause. The knee joints are almost always affected, the other large joints less commonly. Joint symptoms may persist for months afterwards but always resolve completely.

The EN lesions are ushered in by fever, general aching and feeling unwell. Red lumps appear on the shins or about the knees and ankle. They vary in size between a cherry and a grapefruit and in number from 2 to 50 or more. Usually there are about a dozen large lumps on the front and sides of the legs and knees; the thighs, outer aspects of the arms, face and neck are less frequently involved. At these other sites the lesions are smaller and more superficial. The lesions are oval patches which are slightly raised above the surrounding surface, the elevation increasing gradually towards the centre; they are hot and painful, bright red when they first come out, later becoming purple then fading through the colour changes of a bruise.

Lesions continue to erupt for about 10 days. The "bruising" colour-change starts in the second week, becomes most marked in the third week, then subsides at any time from the end of the third week to the sixth week. Aching of the legs and swelling of the ankles may persist for some weeks, especially if the patient does not rest up. New crops of EN may occur over a number of weeks. Rarely, 2 or 3 large lesions merge to form a crescentic ring, which spreads for some days before fading. Conjunctivitis may occur.

Tests

If you have EN, your doctor is likely to arrange some tests. These may include:

- Throat swab
- Sputum or gastric washing if TB is suspected
- Complete blood count and ESR
- ASO titre (a test for streptococcal infection)
- Chest X-ray
- Virus studies
- Yersinia titres
- Mantoux test

Treatment

- Bed rest is advised for severe EN.
- Firm supportive bandages or stockings should be worn.
- Aspirin or other anti-inflammatory medication.
- A course of [potassium iodide](#) is often effective in clearing it.

Mild cases subside in 3 weeks, more severe ones in about 6 weeks. Cropping of new lesions may occur within this

time, especially if the patient is not resting.

Related information

Other websites:

- [Erythema nodosum](#) – emedicine dermatology, the online textbook

Books about skin diseases:

See the [DermNet NZ bookstore](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1997. Last updated 05 May 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).





DermNet NZ



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Scaly skin conditions](#)

Guttate psoriasis

Guttate psoriasis is characterised by multiple tiny areas of psoriasis that tend to affect most of the body. 'Gutta' is Latin for tear drop; guttate psoriasis looks like a shower of red, scaly tear drops that have fallen down on the body. Lesions are usually concentrated around the trunk and upper arms and thighs. Face, ears and scalp are also commonly affected but the lesions may be very faint and quickly disappear in these areas. Occasionally there may be only a few scattered lesions in total.

The diagnosis of guttate psoriasis is made by the combination of history, clinical appearance of the rash, and evidence for preceding infection.

The rash comes on very quickly, usually within a couple of days, and may follow a streptococcal infection of the throat. It tends to affect children and young adults and has a good chance of spontaneously clearing completely.

Guttate psoriasis





Image provided by Dr Trevor Evans

[More images of guttate psoriasis ...](#)

Treatment of guttate psoriasis

Management may include:

- Treatment of an underlying [streptococcal](#) infection with antibiotics
- [Phototherapy](#)
- Topical agents including mild [topical steroids](#), [coal tar](#) and [calcipotriol](#)

Guttate psoriasis rarely requires treatment with oral medications.

Related information

References:

On DermNet NZ:

- [General information about psoriasis](#)
- [Chronic plaque psoriasis](#)
- [Flexural psoriasis](#)
- [Scalp psoriasis](#)
- [Palmoplantar psoriasis](#)
- [Nail psoriasis](#)
- [Palmoplantar pustulosis](#)
- [Pustular psoriasis](#)
- [Erythrodermic psoriasis](#)
- [Psoriatic arthritis](#)
- [Treatment of psoriasis](#)

Other websites:

- [Guttate psoriasis](#) – emedicine dermatology, the online textbook
- [Guttate Psoriasis](#) – emedicine consumer health

Books about skin diseases:

See the [DermNet NZ bookstore](#)

Author: Dr Amy Stanway, Department of Dermatology, [Health Waikato](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 2004. Last updated 15 Jun 2009 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Vascular skin problems](#)

Hereditary haemorrhagic telangiectasia

What is hereditary haemorrhagic telangiectasia?

Hereditary haemorrhagic telangiectasia (HHT) is also known as Osler-Rendu-Weber syndrome. It is a rare inherited disorder that affects blood vessels throughout the body and is characterised by a tendency for bleeding (haemorrhage, American spelling 'hemorrhage'), in particular recurrent epistaxis (nosebleeds), and skin telangiectasia (skin lesions resulting from dilation of blood vessels).

The diagnostic criteria for HHT are:

1. Spontaneous recurrent nosebleeds
2. Multiple telangiectases on skin and mucous membranes
3. Involvement of internal organs
4. An affected parent, sibling or child

What causes HHT?

The two major types of HHT are HHT1 and HHT2. They are caused by mutations in the endoglin (ENG) and activin receptor-like kinase type 1 (ACVLR1) genes found on chromosome 9 and 12 respectively. Two other genes have also been identified. A defect in just one of these genes causes an abnormality in the formation of blood vessels, which may easily rupture and bleed. These abnormal blood vessels are known as telangiectases, or arteriovenous malformations (AVM) if larger blood vessels are involved.

Who gets HHT?

HHT is a rare autosomal dominant condition, which means that only one abnormal gene needs to be inherited from

one affected parent to express the disease. HHT is often passed from generation to generation as each child of a person with HHT has a 50% chance of getting the disease. However, the signs and symptoms of HHT within a single family can vary considerably. One family member may suffer from severe recurrent nosebleeds whilst another with HHT may have minimal symptoms.

What are the signs and symptoms of HHT?

The most common sign of HHT is telangiectases in the nose and the most common symptom is recurring nosebleeds. The first sign of HHT usually does not occur until puberty or adulthood with the average age of the first nosebleed occurring at 12 years. Bleeding may occur as often as everyday or as infrequently as once a month. Recurrent nosebleeds are seen in 50-80% of patients with HHT.

Telangiectases in other parts of the body is not usually seen until after puberty and is most apparent in people aged between 20 and 40 years. It occurs in about 95% of patients with HHT. Telangiectasia of the skin and mucous membranes has the following characteristics.

- Appearance of small red to purplish spots or dark red lacy lines on the skin and mucous membranes
- Lesions may occur anywhere but especially on the upper half of the body including the face, inside the mouth and nostrils, lips, ears, conjunctiva of the eyes, forearms, hands and fingers. They are often conspicuous in the nail beds.
- Lesions may initially appear subtle but become quite prominent by late adulthood
- Telangiectases on the skin and mouth can bleed but are less likely to than those in the nose

In addition to visible telangiectases, abnormal blood vessel formation may occur in many other organs. Telangiectases can be found anywhere in the gastrointestinal (GI) system, including the oesophagus, stomach, and small and large intestines. GI bleeding occurs in about 25% of patients with HHT and the risk is increased in patients older than 50 years. Black or bloody stools and/or anaemia (low blood count) are the presenting symptoms. Other organs that may be affected include the lungs (AVM in the lungs occur in about 30% of patients with HHT) and central nervous system (brain and spinal AVM).

Hereditary haemorrhagic telangiectasia



Can HHT be treated?

HHT cannot be prevented but most cases can be treated symptomatically. One third of the cases of HHT are mild, one third are moderate, and one third are severe. Mild cases usually require no treatment. HHT should be treated if it is

causing significant problems, such as severe and/or frequent nosebleeds, or if there is a high risk of causing other problems, such as a stroke from a lung AVM.

- Nosebleeds can be treated with laser coagulation therapy or surgically with nasal septum skin transplants (septal dermoplasty)
- Telangiectases or lesions of the skin can be treated with cautery or dye laser surgery, best performed by a dermatologist
- GI bleeding causing anaemia is treated with iron replacement therapy. If this is ineffective then blood transfusion and endoscopic treatments may be performed.

Related information

References:

- [OMIM – Online Mendelian Inheritance in Man](#) (search term Hereditary haemorrhagic telangiectasia)
- Book: Textbook of Dermatology. Ed Rook A, Wilkinson DS, Ebling FJB, Champion RH, Burton JL. Fourth edition. Blackwell Scientific Publications.
- [Osler-Weber-Rendu Syndrome](#) – emedicine dermatology, the online textbook

On DermNet NZ:

- [Ataxia-telangiectasia](#)
- [Generalised essential telangiectasia](#)

Other websites:

- [The Hereditary Hemorrhagic Telangiectasia Foundation](#) (USA)
- [International Website Telangiectasia Self Help Group](#) (UK)

Books about skin diseases:

See the [DermNet NZ bookstore](#)

Author: Vanessa Ngan, staff writer

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 2006. Last updated 15 Jun 2009 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Hair, scalp, nails & sweating](#)

Hirsutism

Hirsutism (or hirsutes) is the term used for increased hair growth in women. It refers to a male pattern of hair, i.e. in the moustache and beard areas (chin), or occurring more thickly than usual on the limbs. Hirsutism is very common.

There may be hairs on the chest or an extension of pubic hair on to the abdomen and thighs. What is considered normal for a woman, and what is considered hirsute, depends on cultural factors and race.

Hirsutism



What is the cause of hirsutism?

Hirsutism is nearly always genetic in origin. Female and male relatives may also have more hair than the average so hirsutism is normal in that family. Unfortunately in our society, to be hirsute is thought unattractive.

The only reason that fashion models appear to have little hair, is that they spend a lot of time and energy removing it.

Although some women with hirsutism have increased amounts of male hormones or androgens (e.g. testosterone), most have normal levels. The problem in these women is that the hairs are more sensitive than normal to small amounts of hormone. The hairs grow more quickly and thicker in response to it. The increased hair growth is usually first noted in late teenage years and tends to gradually get more severe as the woman gets older.

The main conditions associated with excessive androgens are [polycystic ovaries](#) and less often, [congenital adrenal hyperplasia](#).

Investigations

Blood tests may be arranged to evaluate male hormone levels, which could be due to a tumour or overactivity of the pituitary gland, the adrenal gland or the ovary. Other causes of excessive hair and associated medical problems may also need to be evaluated. The tests may include one or more of the following:

- Total and free testosterone
- Sex hormone binding globulin
- Free androgen index
- Dihydroxyepiandrosterone sulfate
- Androstenedione (drawn after 10 a.m.)

If there is also menstrual disorder, additional tests may be requested.

- Luteinizing hormone (LH) and follicle stimulating hormone (FSH)
- Oestradiol, 17-hydroxy progesterone
- Prolactin

Tests may be requested to evaluate other related aspects of health, for example:

- Thyroid function
- Cortisol or overnight dexamethasone test
- Glucose
- Lipids (cholesterol and triglyceride)

A pelvic examination and abdominal / transvaginal ultrasound examination of the ovaries may be necessary as one common cause of hirsutism is [polycystic ovaries](#).

Physical methods of hair removal

Bleaching

Bleaching makes the excessive hair less obvious.

Depilatory creams

Depilatory creams are generally based on thioglycolate (also used in perming solutions). A thick layer is applied for 15-30 minutes to the hairy area, then wiped off and the hair comes off with the cream. Depilatory creams can irritate and cause dermatitis.

Shaving

Shaving, if necessary twice daily, will prevent unsightly stubble. Shaving does not make the hair grow more thickly.

Waxing

[Waxing](#) needs to be repeated every six weeks. The warm wax hardens on the skin and as it is stripped off, the hairs are pulled out with it from the roots.

Electric hair removers

These remove the hair by a combined cut and pull.

Electrolysis/thermolysis

[Electrolysis](#) or thermolysis may result in permanent hair loss but it takes time. A small probe is inserted along each hair, and a small electrical or heat discharge destroys the hair. A small area is treated every few weeks. It can be expensive if the area affected is extensive. Unskilled treatment may cause scarring.

Laser therapy

New long wavelength [lasers](#) and [intense pulsed light](#) are under investigation for the removal of body hair. Time will tell how effective these will be.

Complications of physical methods of hair removal

[Folliculitis](#) is an unfortunate risk of plucking, shaving, and waxing. The treated hair follicles become inflamed, and painful pustules may develop.

Folliculitis may take weeks to settle. Hair removal has to be stopped, at least temporarily.

Folliculitis due to hair removal



Medical Treatment

[Hormonal treatment](#) using antiandrogen medicines (which counteract the male hormone) may be used for women with moderate or severe hirsutism. In many cases the hair growth slows down and the hairs become thinner and less noticeable. It takes between six and twelve months to notice much difference, and then the medicine should be continued for several years.

Spironolactone

Spironolactone 50-200 mg daily can slowly reduce excessive hair growth. It is sometimes combined with the oral contraceptive pill. Side effects include tender breasts and irregular menstrual bleeding.

Oral contraceptive

Although several low dose combined birth control pills may be helpful, it is best to select one that has been specifically formulated to treat hirsutism. These contain oestrogen and an antiandrogenic progesterone: cyproterone (DianeTM-35, EstelleTM 35), drospirenone (YasminTM, YazTM) or dienogest (ValetteTM). Side effects include spotting (bleeding between periods), tender breasts, nausea and headaches, especially in the first few months. The oral contraceptive pill is not suitable for everyone. Please refer to the New Zealand Ministry of Health ([Medsafe](#)) advice on the use of combined oral contraceptives.

Cyproterone

Larger doses of [cyproterone](#) i.e. 50-200 mg for 10 days each cycle, are combined with the oral contraceptive pill and are very effective for most women with hirsutism. Side effects include weight gain, depression, and loss of libido. Specialist approval is required for prescription in New Zealand.

Hair removal creams containing [eflornithine](#) are available in some countries.

Related information

On DermNet NZ:

- [Polycystic ovarian syndrome](#)
- [Hypertrichosis](#)
- [Hair removal techniques](#)

Other websites:

- [Hirsutism](#) – emedicine dermatology, the on-line medical reference textbook.
- [PCOS and Hirsutism](#) – Center for Fertility and Reproductive Medicine
- [Hirsutism](#) – British Association of Dermatologists
- [Unwanted facial hair](#) – Skin Care Guide

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1997. Last updated 09 Jul 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Skin lesions, tumours and cancers](#)

Intraepidermal squamous cell carcinoma

Intraepidermal squamous cell carcinoma (intraepidermal SCC) is often known as Bowen disease, Bowen's disease or cutaneous squamous cell carcinoma in situ. It is a common type of skin cancer.

[Squamous cell carcinoma](#) (SCC) is a cancer derived from squamous cells, the flat cells that make up the outside layers of the skin (the epidermis). 'In situ' means the malignant cells are confined to cell of origin i.e., the epidermis.

The development of a lump or bleeding may indicate progression into invasive SCC and occurs in about 5% of intraepithelial SCC lesions.

What does intraepidermal SCC look like?

Intraepidermal SCC presents as one or more irregular, flat, red and scaly patches of up to several centimetres in diameter. Although intraepidermal SCC may arise on any area of skin, the lesions are most often diagnosed on sun exposed sites such as the ears, the face, the hands and the lower legs.

Intraepidermal squamous cell carcinoma



[More images of intraepidermal SCC ...](#)

Rarely, intraepidermal SCC may start to grow under a nail, when it results in a red streak (erythronychia) that later may destroy the nail plate.

Intraepidermal squamous cell carcinoma of the nail



© Dr Ph Abimelec – [dermatologue](#) Used by DermNet NZ with permission

What is the cause of intraepidermal SCC?

Intraepidermal SCC arises in aging skin. It may be caused by:

- Sun exposure: intraepidermal SCC is most often found on sun exposed sites of fair skinned individuals. This is because ultraviolet radiation damages the skin cell nucleic acids (DNA) resulting in a mutant clone of the gene p53. This sets off uncontrolled growth of the skin cells. Ultraviolet radiation also suppresses the immune response preventing recovery from this damage.
- [Arsenic](#) ingestion: this may result in multiple areas of intraepidermal SCC on the trunk and limbs some years after exposure.
- Ionising radiation: intraepidermal SCC was common on the hands of radiologists early in the 20th century.
- Human papillomavirus (HPV) infection: this rarely causes intraepidermal SCC. However, HPV infecting genital sites is the cause of [vulval](#) and [penile](#) intraepithelial neoplasia or mucosal SCC in situ.

Treatment of intraepidermal SCC

As intraepidermal SCC is confined to the surface of the skin, there are various ways to remove it.

Cryotherapy

[Cryotherapy](#) means removing a lesion by freezing it, usually with liquid nitrogen. Cryotherapy may be suitable for small, flat patches of intraepidermal SCC.

Superficial skin surgery

Superficial skin surgery refers to [shave, curettage, & electrosurgery](#). The lesion is sliced off or scraped out, then the base is cauterised. The wound usually heals rapidly without the need for stitches.

Fluorouracil cream

[5-Fluorouracil cream](#) contains a cytotoxic agent. The cream may be applied to intraepidermal SCC for 4 to 12 weeks. It causes a vigorous skin reaction that may ulcerate.

Imiquimod cream

[Imiquimod](#) is an immune response modifier in a cream base. Applied five times weekly for six to sixteen weeks, it will

clear most patches of intraepidermal SCC but is not yet licensed for this purpose (June 2008).

Photodynamic therapy

[Photodynamic therapy](#) (PDT) refers to treatment with a photosensitiser (a porphyrin chemical) that is applied to the affected area prior to exposing it to a strong source of visible light. The treated area develops a "burn" and then heals over a couple of weeks or so. [Metvix PDT](#) is now available to treat superficial skin cancers in New Zealand. It appears to provide high cure rates for intraepidermal SCC on the face or lower legs, but is not yet licensed for this purpose (June 2008).

What happens after treatment?


Intraepidermal SCC may recur months or years after treatment. It may be treated again by the same or another method.

Patients who have been treated for intraepidermal SCC are at risk of developing new lesions of intraepidermal SCC. They are also at increased risk of other skin cancers, especially [squamous cell carcinoma](#), [basal cell carcinoma](#) and [melanoma](#). Arrange a complete skin examination from time to time. Ask your [dermatologist](#) or GP to check any persisting or growing lumps or sores or otherwise odd-looking skin lesions. Early detection means easier treatment, and less scarring.

[Protect your skin](#) from excessive exposure to the sun. Stay indoors or under the shade in the middle of the day. Wear covering clothing. Apply broad spectrum [sunscreens](#) to exposed skin if you are outdoors for prolonged periods, especially during the summer months.

Related information

References:

-  [Guidelines for Management of Bowen's Disease: update 2006 \(NH Cox, DJ Eedy, CA Morton\). BJD, Vol. 151, No.1, January 2007 \(p11-21\)](#) – British Association of Dermatologists

On DermNet NZ:

- [Squamous cell carcinoma](#)
- [Skin cancer](#)

Other websites:

- [Best Treatments](#) from the BMJ: clinical evidence about squamous cell carcinoma for patients
- [intraepidermal SCC](#) – emedicine dermatology, the online textbook
- [Bowen's disease](#) – British Association of Dermatologists

Books about skin diseases:

See the [DermNet NZ bookstore](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1997. Last updated 05 Mar 2011 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Skin lesions, tumours and cancers](#)

Keratoacanthoma

A keratoacanthoma is a false [skin cancer](#) that looks like a little volcano.

A keratoacanthoma often starts at the site of a minor injury to sun damaged skin. At first it may appear as a small pimple or boil and may be squeezed but is found to have a solid core. It then grows rapidly and by the time it is brought to the attention of the doctor may be up to 2cm in diameter.

Keratoacanthoma



©R Suhonen

[More images of keratoacanthoma ...](#)

What causes keratoacanthoma?

Past sun exposure certainly plays a role. It appears that keratoacanthomas arise from a single hair follicle as they are only seen on hair-bearing skin, not on the palms, for instance. A minor injury seems to be required to trigger off a keratoacanthoma but this is often either not apparent or unremembered by the patient. Cells start multiplying in the hair follicle and the cell mass grows into a keratoacanthoma.

Some keratoacanthomas appear to be related to infection with human papilloma virus, the cause of [warts](#).

Untreated, a true keratoacanthoma will go on growing for several months, reach a maximum size then self-destruct over several more months.

Unfortunately a keratoacanthoma can look exactly like a true skin cancer, a [squamous cell carcinoma](#) (SCC), or less commonly like a [basal cell carcinoma](#) (BCC).

Multiple keratoacanthomas

There are some rare conditions in which multiple keratoacanthomas appear. These are:

- **Ferguson-Smith familial keratoacanthoma** More common in men, there are large and sometimes ulcerated self-healing lesions.
- **Grzybowski eruptive keratoacanthomas** Thousands of very itchy keratoacanthomas appear on the skin and mucosal surfaces and can result in significant deformity.

Management requires oral medications such as [acitretin](#), [methotrexate](#) or [cyclophosphamide](#).

Treatment

If you have a keratoacanthoma, seek the advice of your doctor, [dermatologist](#) or plastic surgeon.

Keratoacanthomas should be treated for several reasons. Firstly, it is not always possible to be sure the lesion is a keratoacanthoma and not a true skin cancer. A pathologist may report squamous cell carcinoma when the dermatologist has been fairly sure that the lesion is a keratoacanthoma. Secondly, the patient wishes to be rid of what is usually an unsightly, often tender and worrisome lesion as soon as possible. Finally, the scar which results from treating a keratoacanthoma is often better than if it is left to resolve spontaneously.

- **Freezing** If a keratoacanthoma is small it may be treated by [freezing](#) with liquid nitrogen with a spray or on a cotton wool swab. Following this the treated site will swell, may or may not blister, then dries out to form a scab which takes about 2 weeks to come off, longer on the limbs.
- **Curettage and cautery** [Curettage and cautery](#) is sometimes used for thicker lesions. A little anaesthetic is injected around the base of the lesion and it is then scraped out with a sharp spoon. The base of the keratoacanthoma is cauterized with an instrument similar to a soldering iron. Following this healing is usually rapid and the scab comes off in about 3 weeks to leave a slightly depressed, pink to purple scar. This scar then pales down and remodels to eventually leave a usually very acceptable cosmetic result. Healing takes longer with larger lesions and on the lower legs where it can take up to 2 months.
- **Excision** [Excision](#) is another common method of removing a keratoacanthomas. After injecting local anaesthetic, the affected area is cut out in an ellipse ensuring complete removal. The resulting defect is then stitched up. The stitches are removed a week or so later, leaving a linear scar. Rarely, Mohs microscopically controlled surgery may be required for larger keratoacanthomas, especially if they have recurred.
- **Radiotherapy** - Sometimes a large keratoacanthoma is treated by [radiotherapy](#). Several visits over a period of days are usually required. The treatment is quite painless. A scab then forms and drops off after several weeks.

Follow-up

Normally there will be no further problem with a keratoacanthoma after treatment. Rarely, a recurrence will form, usually on the edge of the scar. In this case the lesion can be readily re-treated, usually by the same method.

Patients with keratoacanthomas are at risk of further similar lesions and other skin cancers; seek your doctor's help promptly if you develop any growing lumps or sores which fail to heal.

Related information

On DermNet NZ:

- [Skin lesions](#)
- [Grzybowski eruptive keratoacanthomas](#)
- [Solar keratoses](#)
- [Squamous cell carcinoma](#)
- [Basal cell carcinoma](#)
- [Melanoma](#)
- [Sun protection](#)

Other web sites:

- [Keratoacanthoma](#) – emedicine dermatology, the online textbook
- [Keratoacanthoma](#) – British Association of Dermatologists

Books about skin diseases:

See the [DermNet NZ bookstore](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Last updated 27 Feb 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Immunological disorders](#)

Lichen sclerosis

Lichen sclerosis is chronic skin disorder that most often affects the genital and perianal areas. It usually persists for years, and can cause permanent scarring. There is no known cure, although most people are substantially improved and quite comfortable with treatment.

Lichen sclerosis (LS) is ten times more common in women than in men. It can start at any age, although it is most often seen in women over 50. Prepubertal girls can also be affected. It may cause no symptoms but it can be itchy, sometimes severely so. It can develop after an injury to the affected area. It may follow or co-exist with another skin condition such as [lichen simplex](#), [candidiasis](#) or [erosive lichen planus](#).

What does it look like?

Lichen sclerosis presents as white crinkled or thickened patches.

Vulval lichen sclerosis

In women, lichen sclerosis results in a white thickening of the skin of the vulva. It can be localised to one small area or involving the perineum, labia majora, labia minora, fourchette and clitoris. Sometimes the clitoris disappears, the labia (lips) can shrink and the entrance to the vagina tightens. Lichen sclerosis never affects inside the vagina.

The affected skin can be unbearably itchy (the symptom known as [pruritus vulvae](#)) and/or sore ([vulvodynia](#)). Sometimes bruises, blood blisters and ulcers appear, after scratching, or on their own.

Sexual intercourse can be very uncomfortable and may result in splitting of the skin (fissuring). The skin around the anus may be involved, which may cause discomfort passing bowel motions, and aggravate any tendency to constipation.

Lichen sclerosis is associated with an increased risk of [vulvar cancer](#), which presents as a slowly-growing lump or a sore that doesn't heal. It may affect up to 5% of patients with vulvar lichen sclerosis. In some cases it is associated

with [genital warts](#) (human papillomavirus) and [vulval intraepithelial neoplasia](#) (VIN).

[Images of vulval lichen sclerosis...](#)

[Images of perianal lichen sclerosis ...](#)

Penile lichen sclerosis

In men, lichen sclerosis usually affects the tip of the penis, which becomes firm and white (also called balanitis xerotica perstans). The urethra may narrow such that it is difficult to pass urine, resulting in a thin stream. Sometimes the passage has to be widened with a special operation, called meatal dilation. The foreskin may become difficult to retract (phimosis) and a circumcision may be needed.

Penile lichen sclerosis may rarely predispose to [penile cancer](#). Long term follow-up is therefore recommended.

[Images of penile lichen sclerosis ...](#)

Other skin sites

Lichen sclerosis may also affect non-genital areas in 10% of patients with vulval disease. Six percent of affected men and women have no genital involvement. One or more white patches may be found on the inner thigh, buttocks, under the breasts, neck, shoulders and armpits. They often look like cigarette paper, with a wrinkled surface and waxy thickened feel. Less often they are scaly, bruised-looking, blistered or ulcerated. In these sites, lichen sclerosis is generally not itchy and it does not appear to predispose to cancer.

Non-genital lichen sclerosis



[More images of extragenital lichen sclerosis ...](#)

What is the cause of lichen sclerosis?

The cause of lichen sclerosis is not fully understood and may include genetic, hormonal and infectious components. Lichen sclerosis is believed to relate to an autoimmune process, in which there are antibodies to a component of the skin. This is possibly extracellular matrix protein-1 (ECM-1) as antibodies to this protein have been detected in 75-80% of women with vulval lichen sclerosis.

Other autoimmune conditions such as thyroid disease (about 20% of patients), pernicious anaemia, [vitiligo](#), [alopecia areata](#) and [psoriasis](#) are reported to be more frequent than expected in patients who have lichen sclerosis and in their families.

How is it diagnosed?

Often the diagnosis is made by a dermatologist or gynaecologist after a careful clinical examination. A [skin biopsy](#) is frequently recommended to confirm the diagnosis, as there are characteristic histopathological findings in lichen sclerosis. A biopsy also rules out other possible explanations for the skin condition such as [dermatitis](#), [lichen planus](#) and [vulval intraepithelial neoplasia](#). Sometimes these disorders may co-exist with lichen sclerosis.

During follow-up, your specialist may decide to perform another biopsy to evaluate areas of concern.

Treatment

Strong [topical steroid](#) creams or ointments (especially clobetasol propionate) are very helpful for lichen sclerosis, especially when it affects genital areas. They should be applied very accurately to the affected areas for a few weeks or months. Over-use of steroid creams can result in skin thinning; it is most important to follow instructions carefully and to attend follow-up appointments regularly.

Most patients will be told to apply the steroid cream once a day initially. The doctor should reassess the treated area after a few weeks as the response to treatment is quite variable. The itch often settles within a few days but it takes weeks to months for the appearance to return to normal. Once the lichen sclerosis has resolved or skin thinning due to the cream has arisen, the cream should be used less often. Generally it will need to be continued on a regular basis (perhaps once a week) to prevent the lichen sclerosis recurring. In general, after initial more generous treatment, one 30g tube is expected to last about 6 months.

Wash gently in a shower or bath with plain water alone or with a [non-soap cleanser](#). Try to avoid rubbing and scratching. Some patients find it helpful to apply an emollient cream or petrolatum several times a day to relieve dryness or itching.

If the first topical steroid is not well tolerated or ineffective, another one should be used. An ointment may be preferred to a cream (or vice versa).

There are a variety of other treatments occasionally prescribed as well or instead of steroid creams. These include [calcipotriol cream](#), [topical](#) and systemic retinoids ([acitretin](#)), and [systemic steroids](#). The new immune modulating creams [tacrolimus](#) and [pimecrolimus](#) look promising for treating lichen sclerosis, but may be difficult to use because they tend to cause burning. There is also concern that these medications may have the potential to accelerate skin cancer formation in the presence of oncogenic human papilloma virus ([genital warts](#)). [Photodynamic therapy](#) has also been reported to be of benefit, but the procedure may be very painful.


Topical oestrogen creams are not effective for lichen sclerosis but may be prescribed for postmenopausal atrophy (dry, thinned and sensitive vulval and vaginal tissues due to hormonal deficiency).

If the vaginal opening has narrowed, it may need gentle stretching using dilators. Rarely, surgery is necessary to allow sexual intercourse. Unfortunately, the lichen sclerosis sometimes closes up the vaginal opening again after surgery has initially appeared successful.

Surgery to remove the entire vulva (vulvectomy) is reserved for the most severe cases or if there is vulvar cancer or pre-cancer (vulvar intraepithelial neoplasia or VIN).

Related information

References:

 [Guidelines for the Management of Lichen Sclerosus \(SM Neill, FM Tatnall, NH Cox\) BJD, Vol. 147, No. 4, October 2002 \(p640-649\)](#) – British Association of Dermatologists

On DermNet NZ:

- [Genital skin conditions](#)
- [Pruritus vulvae](#)
- [Scleroderma](#)

Other websites:

- [Lichen sclerosus et atrophicus](#) – emedicine dermatology, the online textbook
- [UK National Lichen Sclerosus Support Group](#)
- [Lichen Sclerosus](#) – British Association of Dermatologists

Self-help books

- [The V Book: A Doctor's Guide to Complete Vulvovaginal Health](#)
- [The Vulvodynia Survival Guide: How to Overcome Painful Vaginal Symptoms & Enjoy an Active Lifestyle](#)



DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1997. Last updated 07 Jul 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).







DermNetNZ.org



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Site & age specific skin problems](#) | [Mouth problems](#)

Oral leukoplakia

What is oral leukoplakia?

Oral leukoplakia is the most common premalignant or potentially malignant disorder of the oral mucosa.

It is defined as a white patch or plaque of the oral mucosa that cannot be characterized clinically or pathologically as any other disease.

Oral leukoplakia is a clinical diagnosis of exclusion. Diseases to be excluded include [nicotine stomatitis](#), [candidiasis](#), [lichen planus](#), frictional keratoses, habitual cheek or lip biting, [lupus erythematosus](#), etc.

Who does it affect?

Oral leukoplakia may affect about 0.5% of the world population, although it is likely to vary with gender, geography and ethnicity.

There is a strong association with tobacco [smoking](#) (six times more common in smokers than non-smokers) and alcohol intake (independent of drinking pattern or beverage type). It is also associated with betel quid chewing and [oral submucous fibrosis](#).

It usually appears in adult life with prevalence increasing with increasing age:

- found in less than 1% of men under 30 years of age
- 8% of men over 70 years of age
- 2% of women over 70 years of age
- rare before age 30, peaks after 50 years
- mainly affects middle aged to elderly men

non-smokers are likely to present at an older age.

In children, consider [dyskeratosis congenita](#) and hidrotic [ectodermal dysplasia](#).

Clinical features of oral leukoplakia

An early lesion is a slightly elevated grey-white plaque either well defined or which blends in gradually with surrounding mucosa. It can be a localised solitary lesion or multifocal and diffuse.

Two clinical forms are recognised.

1. Homogeneous – refers to homogeneous uniform colour AND texture

- uniform white colour
- uniform flat, thin appearance

The surface may become leathery – smooth, wrinkled, corrugated or with shallow cracks. This form is usually asymptomatic.

2. Non-homogeneous – refers to irregularity of either the colour OR the texture

- predominantly white or white-red (erythroleukoplakia)
- irregular texture which can be flat, nodular, exophytic, warty

Variants of the non-homogeneous form have been described including nodular, verrucous (including proliferative verrucous) and speckled. This form may be associated with mild discomfort or localized pain.

The most common site affected is the inside cheeks (buccal mucosa) and then in decreasing order of frequency:

- gums (alveolar mucosa)
- lower lip
- floor of mouth (under tongue)
- sides or undersurface of tongue (lateral or ventral tongue)
- soft palate

Oral leukoplakia



Association with squamous cell carcinoma (SCC)

A large proportion of [oral cancers](#) are associated with preceding longstanding oral leukoplakia and possibly 1% of oral leukoplakias overall become cancer. This figure is higher for the non-homogeneous form, especially the proliferative verrucous variant, which nearly always becomes cancerous.

There may be no change in appearance or symptoms in the early stages of cancer development. Classic changes of cancer are ulceration, induration/hardness, bleeding and tumour outgrowth.

Factors reported as associated with increased risk of SCC development:

1. Dysplasia (atypical changes) on histology is regarded as the most important factor. However it is important to note that dysplastic lesions can resolve spontaneously and nondysplastic lesions may develop into cancer.
2. Site – floor of mouth under the tongue and the sides/undersurface of tongue
3. Clinical type – speckled non-homogeneous, especially proliferative verrucous leukoplakia
4. Female sex
5. If the leukoplakia is NOT associated with tobacco use.
6. Long duration of disorder
7. Large lesion size
8. Presence of *Candida albicans* – but this is most commonly found in lesions at the angles of the mouth or top surface of tongue, which are rare sites for cancer development.

No molecular tumour markers have yet been found that can be used to predict cancer development in an individual or lesion. The role of human papillomaviruses ([wart](#) virus) has not yet been determined.

How is the diagnosis made?

- [Biopsy](#) of clinically suspected oral leukoplakia is mandatory to: exclude recognised diseases, and to assess for the absence or presence and grade of dysplasia.
- It is appropriate to wait 2 weeks after first presentation to assess clinical response to initial treatment, e.g. for candida, change in tooth brushing habit, cessation of smoking, etc
- The biopsy may be incisional or excisional, single or multiple and may be done under local or general anaesthetic depending on site, number of biopsies required and type of biopsy.
- Biopsies should be taken from either a symptomatic area, or if asymptomatic then from red or indurated areas.
- The presence of dysplasia, carcinoma-in-situ and invasive carcinoma cannot always be predicted clinically.

The histopathology of oral leukoplakia is not diagnostic. Epithelial changes range from atrophy (thinned) to hyperplasia (thickened) and it may show hyperkeratosis. Dysplasia (atypical changes) may be mild, moderate, severe, carcinoma in situ or invasive carcinoma. The pathology report must comment on the absence or presence of dysplasia, and the severity.

Treatment of oral leukoplakia

It is not known if early active treatment prevents the possible development of squamous cell carcinoma and there is a high recurrence rate after treatment.

1. Avoid aggravating habits eg quit smoking, and
2. Surgical [excision](#), or
3. CO2 [laser](#) – excision or vaporisation.
4. Possible other options – retinoids ([acitretin](#) or [isotretinoin](#)), [photodynamic therapy](#).

Lifelong follow-up is recommended whether or not the disorder has been treated:

- 3-12 monthly clinical checks
- Biopsy of suspicious changes

Oral mucosal examination must include the floor of mouth and sides of tongue using gauze to hold tip of the tongue and pull upwards and side to side. Most oral SCC develop in the sides & undersurface of the tongue, floor of mouth and back to the soft palate and tonsillar area.

Related information

References:

- Dermatology. Ed. Bologna, J et al. 2nd edition 2007. Mosby.
- van der Waal, Isaäc . Potentially malignant disorders of the oral and oropharyngeal mucosa; terminology, classification and present concepts of management. Oral Oncology 45 (2009) 317–323. [Medline](#).

On DermNet NZ:

- [Oral cancer](#)
- [Hairy leukoplakia](#)

Other websites:

- [Leukoplakia, Oral](#) – emedicine

Books about skin diseases:

See the [DermNet NZ bookstore](#)

Author: Dr Delwyn Dyall-Smith, Dermatologist

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 2009. Last updated 07 Jul 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).

5HT3 antagonists

5HT3 antagonists are antiemetics used mainly in the management of chemotherapy related nausea

Examples

- ondansetron
- granisetron





DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Immunological disorders](#)

Pemphigoid gestationis

What is pemphigoid gestationis?

Pemphigoid gestationis is a rare pregnancy-associated autoimmune skin disease that is characterised by an itchy rash that develops into blisters. It is most common during the second and third trimesters of pregnancy. It is also known as herpes gestationis although it has no association with the herpes virus whatsoever.

What causes pemphigoid gestationis?

Pemphigoid gestationis is an autoimmune blistering disease, which basically means that an individual's immune system starts reacting against his or her own tissue. Immunoglobulin type G (IgG) autoantibodies (known as the PG factor) cause the damage.

In pemphigoid gestationis the target is a protein known as BPAG2 (also called BP180), found within the basement membrane, which is the zone between the epidermis and the dermis (the top and middle layers of skin). BPAG2 is within the hemidesmosome, the cell component that sticks the epidermal keratinocyte cells to the dermis.

The antibody attack results in inflammation and separation of the epidermis from the dermis allowing fluid to build up and create a blister.

What are the signs and symptoms of pemphigoid gestationis?

Most patients present with an intensely itchy hive-like rash during mid to late pregnancy (13 to 40 weeks gestation).

- Initially there are itchy red bumps around the belly button
- Within days to weeks, the rash spreads to other parts of the body including the trunk, back, buttock, and arms. The face, scalp, palms, soles and mucous membranes are usually not affected.

- After 2-4 weeks, large, tense fluid-filled blisters form
- Some patients may have no blisters but instead have plaques (large raised patches)

Pemphigoid gestationis



In some cases, pemphigoid gestationis occurs throughout pregnancy. Symptoms may lessen or spontaneously resolve towards the end of the pregnancy but this is short-lived, as 75-80% of women will experience a flare-up around delivery. In most cases, symptoms resolve days later after giving birth, however in some, the disease remains active for months or years. Commencement of menstrual periods, use of oral contraceptives or further pregnancies may cause flare-ups.

Tests for pemphigoid gestationis

Diagnosis generally requires a [skin biopsy](#), which shows typical features of subepidermal blistering, similar in microscopic appearance to [bullous pemphigoid](#) (BP) or epidermolysis bullosa acquisita (EBA). Pemphigoid gestationis is confirmed by direct immunofluorescence staining of the biopsy to reveal antibodies. It can be distinguished from BP and EBA using salt split samples of skin. In some cases, circulating antibodies can be detected by a blood test (indirect immunofluorescence test).

Treatment of pemphigoid gestationis

The primary aim of treatment is to relieve itching, prevent blister formation and treat secondary infections. [Topical corticosteroids](#) are used in mild disease whilst [oral corticosteroids](#) are necessary in more extensive cases. Minimum effective doses should be used to reduce the risk of side effects to both mother and fetus. Oral [antihistamines](#) may be used to relieve itching.

In most cases, pemphigoid gestationis resolves spontaneously within days after delivery so treatment can be tapered off and stopped. Complications are rare but may include:

- Premature delivery
- Transient blistering on the infant that resolves with clearance of maternal antibodies (about 3-4 months)
- Secondary infection, which may leave scarring

Related information

References:

On DermNet NZ:

- [Skin problems in pregnancy](#)
- [Blistering diseases](#)
- [Bullous pemphigoid](#)
- [Pruritic urticated papules and plaques of pregnancy](#) (PUPPP)
- [Epidermolysis bullosa acquisita](#)

Other websites:

- [Pemphigoid gestationis](#) – emedicine dermatology, the online textbook
- [Online support group](#)
- [International Pemphigus & Pemphigoid Foundation](#)
- [Pemphigoid \(Herpes\) Gestationis](#) – British Association of Dermatologists

Books about skin diseases:

See the [DermNet NZ bookstore](#)

Author: Vanessa Ngan, staff writer

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

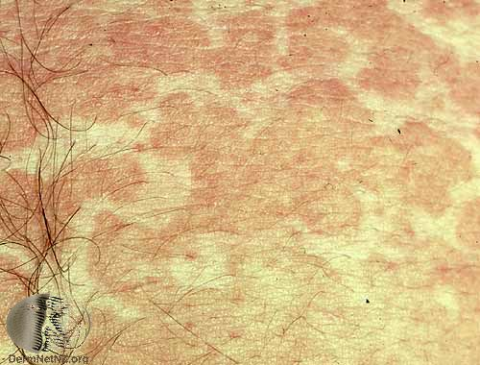
Created 2003. Last updated 27 Feb 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).





Dr. Neel











DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-ZCME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Eczema, dermatitis and allergies](#)

Pompholyx

Pompholyx is a common type of [eczema](#) affecting the hands (cheiropompholyx), and sometimes the feet (pedopompholyx). It is also known as *dyshidrotic eczema* or *vesicular eczema* of the hands and/or feet.

Clinical features

The first (acute) stage shows tiny blisters (vesicles) deep in the skin of the palms, fingers, instep or toes. The blisters are often intensely itchy or have a burning feeling. The condition may be mild with only a little peeling, or very severe with big blisters and cracks which prevent work.

The later and more chronic stage shows more peeling, cracking, or crusting. Then the skin heals up, or the blistering may start again. One site may be blistering, while another is dry and cracked.

Severe pompholyx around the nail folds may cause [nail dystrophy](#), resulting in irregular ridges and chronic [paronychia](#) (nail fold swelling).

Pompholyx





More images of [pompholyx](#) ...

What is the cause of pompholyx?

The exact cause is not known. Some investigators consider it is caused by abnormal sweating.

Complications

Secondary infection with [staphylococcal bacteria](#) is not infrequent. The result is pain, redness, swelling and crusting or pustules.

Infected pompholyx



Aggravating factors

As in other forms of [hand dermatitis](#), pompholyx is aggravated by contact with irritants such as water, detergents and solvents. Contact with them must be avoided as much as possible and protective gloves worn to prevent additional [irritant contact dermatitis](#). Some people with pompholyx are found to be allergic to [nickel](#), a common metal. Nickel allergy can be detected by [patch testing](#). These patients must try not to touch nickel items.

Pompholyx often runs a chronic course, but may go away for long periods. It often reappears after a period of nervous tension, worry or stress. Unfortunately pompholyx does not have any quick sure cure.

Treatment

Treatment varies with the stage of the disease.

Cool compresses

Soaks or compresses using weak solutions of Condy's crystals ([potassium permanganate](#)), aluminium acetate, or vinegar in water, are applied for 15 minutes four times a day. This will dry up blisters. Compresses are not suitable for dry eczema.

Emollients

[Emollients](#) or hand creams, eg. dimeticone barrier cream, should be applied liberally and frequently to keep the skin soft.

Topical steroid

Potent [topical steroids](#) should be applied to the affected areas nightly. They help reduce inflammation and itching. The more potent products should not be used for more than two weeks unless your doctor advises otherwise. Steroid creams are used when the skin is blistered or weeping. Steroid ointments are used for the chronic dry stage.

Antibiotics

Antibiotics such as [flucloxacillin](#) should be prescribed by your doctor for secondary infection.

Systemic steroids

Sometimes cortisone preparations are prescribed by tablet or injection for severe cases. The condition clears dramatically but may recur just as severely after the medication is stopped. Long term treatment with these [systemic steroids](#) is rarely advisable because of undesirable side effects.

PUVA therapy

[PUVA](#) therapy can be useful in selected cases. This is a special kind of ultraviolet (UV) treatment. Several times weekly the affected areas are soaked in a special solution (psoralen), before exposure to long wave UV light. Treatment is usually continued for several months. Usually the measures described result in satisfactory control. Sooner or later the eruption subsides and disappears.

Other medications used occasionally for pompholyx include;

- [methotrexate](#)
- [dapsone](#)
- [azathioprine](#)
- [botulinum toxin](#) (to prevent sweating)

Related information

On DermNet NZ:

- [Dermatitis](#)
- [Hand Dermatitis](#)
- [Hand care in healthcare workers](#)
- [Irritant contact dermatitis](#)

- [Nickel](#)
- [Patch testing](#)
- [Topical steroids](#)
- [Systemic steroids](#)
- [PUVA](#)

Other websites:

- [AllAllergy.Net](#): Allergy and intolerance information resource
- [Dyshidrotic eczema](#) – emedicine dermatology, the online textbook

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1997. Last updated 07 Mar 2011 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

Bio-Oil® The doctors' choice

Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Skin reactions to external agents](#)

PUPPP

The term PUPPP is short for *Pruritic Urticarial Papules and Plaques of Pregnancy*, a skin condition also known as *Polymorphous Eruption of Pregnancy* or *Polymorphic eruption*. It is an itchy, bumpy rash that starts in the stretch marks of the abdomen in the last 3 months of [pregnancy](#) then clears with delivery.

What causes PUPPP?

PUPPP is thought to be related to stretching of the skin on the abdomen. Somehow the rash develops as a sort of "allergy" to the stretch marks and spreads elsewhere on the body. Supporting the stretch mark theory are the following observations:

- Most cases begin in the last 3 months, especially the last 5 weeks, when the stretching is greatest. It is rare for PUPPP to begin after delivery.
- PUPPP is most common in a first pregnancy, when the abdomen is tightest.
- The rash usually starts around the umbilicus where stretching of the abdomen is greatest.
- On average, patients with PUPPP have greater weight gain, babies that are heavier than normal and an increased chance of having twins.

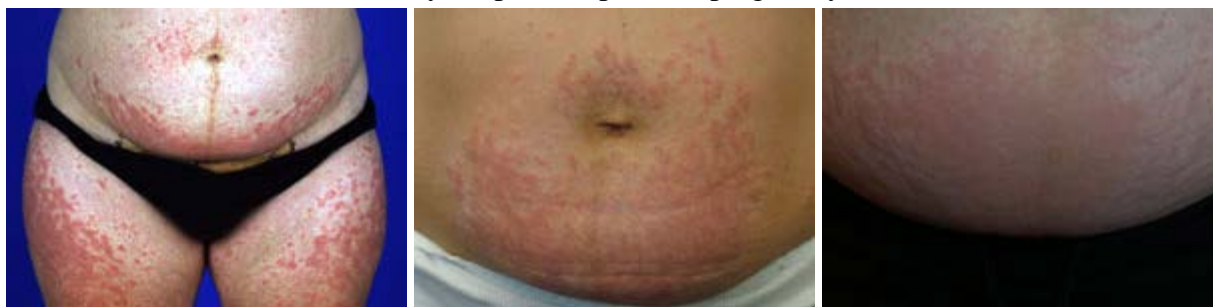
Another theory considers low level traffic of fetal cells within the mother's circulation, which appears increased in women with PUPPP and may persist for some time after the baby has been born.

What are the features of PUPPP?

Small, pink, raised spots (papules) appear in the stretch marks around the umbilicus. There is often a pale halo around the papules. These papules coalesce to form large red, raised (urticarial) patches (plaques) which spread to involve the buttocks and thighs, and sometimes the arms and legs. Lesions on or above the breasts are rare.

PUPPP is very itchy (pruritic) and patients find it difficult to sleep at night.

Polymorphic eruption of pregnancy



Does PUPPP affect the baby?

Rarely, the baby can be born with a mild PUPPP rash but this soon fades. PUPPP does not cause any other problem with the baby.

How long does PUPPP last?

PUPPP continues until delivery then usually resolves within a few weeks. Rarely, it may persist for longer. In some cases, this relates to retained placental products.

Treatment

There is no curative treatment for PUPPP (apart from delivery!). Symptoms can be controlled using:

- [Emollients](#) (moisturisers) applied liberally and frequently as required.
- [Topical steroids](#) applied thinly twice daily to the red itchy patches.
- [Antihistamines](#) - conventional antihistamine tablets appear safe in late pregnancy (though they may make the baby drowsy on delivery).

Discuss your treatment with your doctor, or ask to be referred to a [dermatologist](#).

Can PUPPP recur with future pregnancies?

This is very uncommon. If it occurs the PUPPP is likely to be milder.

Related information

On DermNet NZ:

- [Skin problems in pregnancy](#)

On other websites:

- [PUPPP](#) – emedicine dermatology, the on-line textbook.
- [Polymorphic Eruption of Pregnancy](#) – British Association of Dermatologists

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1999. Last updated 27 Feb 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).





DermNet NZ



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

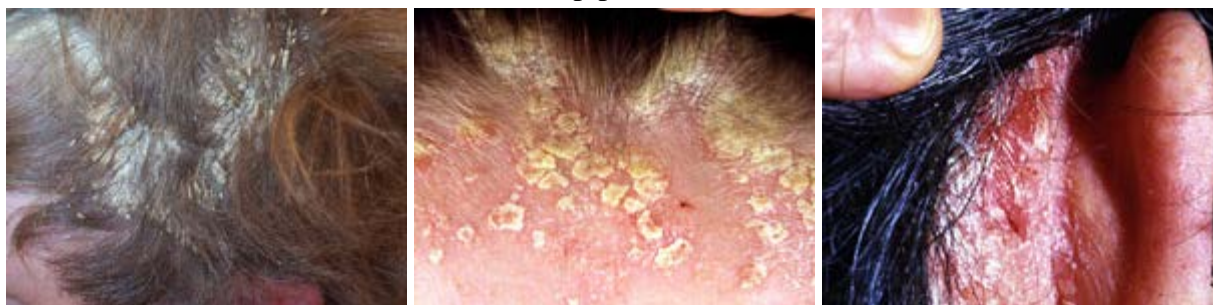
[Home](#) | [Scaly skin conditions](#)

Scalp psoriasis

Scalp psoriasis may occur in isolation or with any other form of psoriasis. The back of the head is a common site but multiple discrete areas of the scalp or the whole scalp may be affected. Scalp psoriasis is characterised by thick silvery white scale on patches of very red skin. It may extend slightly beyond the hairline. Scalp psoriasis, even though often adequately camouflaged by the hair, is often a source of social embarrassment due to flaking of the scale and severe 'dandruff'. Scalp psoriasis may not cause any symptoms at all or may be extremely itchy. It tends to be a chronic problem, lasting many years.

In very severe cases there may be some temporary mild localised hair loss but scalp psoriasis does not cause permanent balding.

Scalp psoriasis



[More images of scalp psoriasis ...](#)

Sebopsoriasis

Sebopsoriasis is an overlap between psoriasis and another common skin condition, [seborrhoeic dermatitis](#). There tends

to be less silvery scale than psoriasis and more yellowish, greasy scale. It also tends to localise to the scalp, face and anterior chest in a similar pattern to that seen in seborrhoeic dermatitis. Sebo-psoriasis has a deeper red colour, more defined margins and a thicker scale than typically seen in seborrhoeic dermatitis alone.

Pityriasis amiantacea

[Pityriasis amiantacea](#) is a condition of the scalp characterised by thick, yellow-white scales densely coating the scalp skin and adhering to the scalp hairs as they exit the scalp. They are arranged in an overlapping manner like tiles on a roof or flakes of asbestos, hence the name. The underlying scalp skin may appear normal, aside from the scale, or may be reddened or scaly. Pityriasis amiantacea is often present without any obvious underlying cause, but may be associated with psoriasis, [lichen simplex](#) or seborrhoeic dermatitis.

Pityriasis amiantacea usually affects only part of the scalp but may occasionally involve the whole scalp. Young girls may have localised pityriasis amiantacea extending into the scalp from areas of chronic fissures in the skin behind the ears. It may extend from an area of lichen simplex of the scalp.

Some hair loss is common in areas of pityriasis amiantacea but hair regrows normally if the condition is effectively treated. This hair loss is sometimes aggravated by the difficulty in combing the hair due to the very adherent, thick scale at the base of the hair shafts. If additional complications such as infection occur then hair loss may be associated with scarring and be permanent.

The term "tinea amiantacea" is incorrect, because fungal infection, [tinea capitis](#), is a very rare reason for this type of scaling.

Scalp care

Scalp psoriasis requires slightly different regimes from psoriasis affecting the skin elsewhere. This is due to hair, which makes application of many topical products difficult and protects the scalp from the effects of ultraviolet light. Unfortunately, many scalp treatments for scalp psoriasis are messy and smelly. Most treatments will need to be used regularly for several weeks before a benefit is seen.

Special medicated [shampoos](#) can be purchased from the chemist.

- [Coal tar](#) shampoos are suitable for most patients with scalp psoriasis.
- [Ketoconazole](#), ciclopirox, zinc pyrithione and other antifungal shampoos are effective for dandruff and seborrhoeic dermatitis. They have varying effect in seborrhopiasis and psoriasis.

The shampoos work best if rubbed into the scalp well, and left in for 5 or 10 minutes and then reapplied. They are safe for daily use but may irritate if applied more than twice weekly. If you dislike the smell of [coal tar](#), try shampooing again with a favourite brand, and use a conditioner.

More severe cases require leave-on scalp applications.

- Alcohol-based, foam or lotion forms of [topical steroid](#) and [calcipotriol](#) can reduce redness and itch but they don't lift scale very well. Use topical steroids intermittently; overuse results in more extensive and severe psoriasis.
- [Salicylic acid](#) and [coal tar](#) creams work much better, but are messy. Coconut oil compound ointment is a combination of coal tar, salicylic acid and sulphur and seems particularly effective. Leave on for at least an hour and shampoo off later. Most people rub the cream into the plaques at night and wash it off in the morning.
- [Dithranol](#) may be effective but is difficult to use and may be messy as it stains hair and fabrics.

Use the scalp preparation daily at first then as the condition improves, reduce the frequency. Unfortunately in many cases the scale soon builds up again, so the creams may have to be applied regularly to keep the scalp clear.

Cutting hair short helps control scalp psoriasis, probably by making the treatments easier to apply, but is not appealing to everyone.

[Phototherapy](#) is effective for chronic plaque psoriasis but difficult to deliver to the scalp. Special targeted devices and [UVB](#) combs have been devised, and appear very helpful. In some cases prolonged clearance has resulted from a course of treatment.

Systemic agents may be justified for a few patients with severe scalp psoriasis that has failed to respond to treatments described above. These include [acitretin](#), [methotrexate](#), [ciclosporin](#) and [biological response mediators](#).

Related information

References:

- Topical treatments for scalp psoriasis. Warren RB, Brown BC, Griffiths CE. *Drugs*. 2008;68(16):2293-302. doi: 10.2165/0003495-200868160-00003. [Medline](#).
- Chan CS, Van Voorhees AS, Lebwohl MG, Korman NJ, Young M, Bebo BF Jr, Kalb RE, Hsu S. Treatment of severe scalp psoriasis: From the Medical Board of the National Psoriasis Foundation. *J Am Acad Dermatol*. 2009 Jun;60(6):962-71. [Medline](#).

On DermNet NZ:

- [General information about psoriasis](#)
- [Chronic plaque psoriasis](#)
- [Flexural psoriasis](#)
- [Guttate psoriasis](#)
- [Palmoplantar psoriasis](#)
- [Nail psoriasis](#)
- [Palmoplantar pustulosis](#)
- [Pustular psoriasis](#)
- [Erythrodermic psoriasis](#)
- [Psoriatic arthritis](#)
- [Treatment of psoriasis](#)

Other websites:

- [Scalp psoriasis](#) – The Psoriasis Association (UK)
- [Scalp psoriasis](#) – National Psoriasis Foundation (US)

Books about skin diseases:

See the [DermNet NZ bookstore](#)

Author: Dr Amy Stanway, Department of Dermatology, [Health Waikato](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 2004. Last updated 16 Oct 2009 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Eczema, dermatitis and allergies](#)

Seborrhoeic dermatitis

What is seborrhoeic dermatitis

Seborrhoeic dermatitis is a common, harmless, scaling rash affecting the face, scalp and other areas. It is most likely to occur where the skin is oily. The American spelling is 'seborrheic', and 'dermatitis' is sometimes called 'eczema'.

Dandruff (also called 'pityriasis capitis') is an uninfamed form of seborrhoeic dermatitis. Dandruff presents as scaly patches scattered within hair-bearing areas of the scalp.

Seborrhoeic dermatitis may appear at any age after puberty. It fluctuates in severity and may persist for years. It may predispose to [psoriasis](#). However, the plaques of psoriasis are more persistent, thicker, and a deeper red colour, with large flakes of white scale. Psoriasis is very likely to affect elbows and knees as well as the scalp. However, sometimes it is difficult to tell psoriasis from seborrhoeic dermatitis on the face, scalp and chest and your doctor may diagnose an overlap condition, known as 'sebopsoriasis'.

What does seborrhoeic dermatitis look like?

Within the scalp, seborrhoeic dermatitis causes ill-defined dry pink or skin coloured patches with yellowish or white bran-like scale. It may spread to affect the entire scalp.

Seborrhoeic dermatitis is common within the eyebrows, on the edges of the eyelids ([blepharitis](#)), inside and behind the ears and in the creases beside the nose. It can result in pale pink round or ring shaped patches on the hairline.

Sometimes it affects the skin-folds of the armpits and groin, the middle of the chest or upper back. It causes salmon-pink flat patches with a loose bran-like scale, sometimes in a ring shape (annular). It may or may not be itchy and can be quite variable from day to day.

Seborrhoeic dermatitis



What is the cause of seborrhoeic dermatitis?

Seborrhoeic dermatitis is believed to be an inflammatory reaction related to a proliferation of a normal skin inhabitant, a yeast called [Malassezia](#) (formerly known as *Pityrosporum ovale*). The main species found in the scalp is *M. globosa*. It produces toxic substances that irritate the skin. Patients with seborrhoeic dermatitis appear to have a reduced resistance to the yeast.

Seborrhoeic dermatitis is not contagious or related to diet, but it may be aggravated by illness, psychological stress, fatigue, change of season and reduced general health. Those with immunodeficiency (especially infection with [HIV](#)) and with neurological disorders such as Parkinson's disease and stroke are particularly prone to it.

Infantile seborrhoeic dermatitis

It is uncertain whether infantile seborrhoeic dermatitis is the same condition. This arises in newborn babies up to the age of six months. It usually presents as [cradle cap](#), but infantile seborrhoeic dermatitis may also affect skin creases such as armpits and groin (when it presents as a type of [napkin dermatitis](#)). Non-itchy salmon pink flaky patches may appear on the face, trunk and limbs in severe cases.



Infantile seborrhoeic dermatitis

Treatment

Seborrhoeic dermatitis in adults may be very persistent. However, it can generally be kept under control with regular use of [antifungal agents](#) and intermittent applications of [topical steroids](#).

Infantile seborrhoeic dermatitis usually clears up completely before the baby is six months old and rarely persists after one year. If treatment is required, mild [emollients](#), hydrocortisone cream and / or topical [ketoconazole](#) are useful.

Scalp

- Medicated [shampoos](#) containing [ketoconazole](#), ciclopirox, [selenium sulfide](#), zinc pyrithione, [coal tar](#), and [salicylic acid](#), used twice weekly for at least a month and if necessary, indefinitely.
- [Steroid](#) scalp applications reduce itching, and should be applied daily for a few days every so often.
- Tar cream can be applied to scaling areas and removed several hours later by shampooing.

Face, ears, chest & back

- Cleanse the affected skin thoroughly once or twice each day using a [non-soap cleanser](#).
- Apply ketoconazole or ciclopirox cream once daily for 2 to 4 weeks, repeated as necessary.
- Hydrocortisone cream can also be used, applied up to twice daily for 1 or 2 weeks. Occasionally a more potent topical steroid may be prescribed.
- Topical calcineurin inhibitors such as [pimecrolimus cream](#) or [tacrolimus ointment](#) may also be useful.
- Severe cases may receive a course of [oral antifungal medication](#) or sometimes, [ultraviolet radiation](#).

Related information

On DermNet NZ:

- [Pityriasis versicolor](#)
- [Malassezia folliculitis](#)
- [Dermatitis](#)
- [Psoriasis](#)
- [Pityriasis amiantacea](#)
- [Malassezia](#)
- [Cradle cap](#)
- [Leiner syndrome](#)
- [Dermatitis online course for health professionals](#)

Other websites:

- [Dandruff](#) – BMJBestTreatments; free access for New Zealanders subsidised by Ministry of Health

- [Seborrheic dermatitis](#) – emedicine dermatology, the online textbook
- [Seborrhoeic Dermatitis](#) – British Association of Dermatologists

Books:

See the [DermNet NZ bookstore](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1997. Last updated 07 Mar 2011 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Skin lesions, tumours and cancers](#)

Seborrhoeic keratoses

Seborrhoeic or seborrheic keratoses are very common harmless skin lesions that appear during adult life. Seborrhoeic keratoses may also be called basal cell papillomas, senile warts or brown warts.

Seborrhoeic keratoses are harmless and rarely or never become malignant.

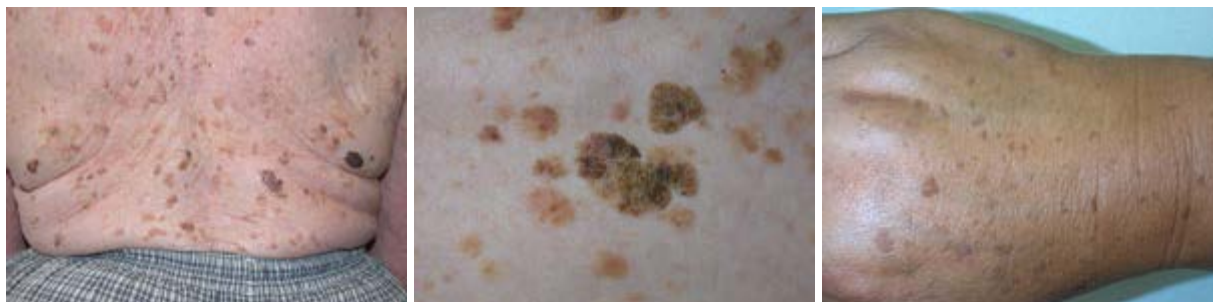
What do they look like?

They begin as slightly raised, skin coloured or light brown spots. Gradually they thicken and take on a rough, warty surface. They slowly darken and may turn black. These colour changes are harmless but may result in the lesion looking like a [melanoma](#) (a type of skin cancer).

They appear to stick on to the skin like barnacles.

Seborrhoeic keratoses appear on both covered and uncovered parts of the body. There may be one or many of them.

Seborrhoeic keratoses





What causes seborrhoeic keratoses?

The cause of seborrhoeic keratoses is not known. The name is misleading, because they are not limited to a seborrhoeic distribution (scalp, mid-face, chest, upper back) as in [seborrhoeic dermatitis](#), nor are they formed from sebaceous glands as is the case with [sebaceous hyperplasia](#).

Seborrhoeic keratoses are considered degenerative in nature, appearing as part of the [skin aging](#) process. As time goes by, seborrhoeic keratoses become more numerous. Some people inherit a tendency to develop a very large number of them.

They are not generally caused by exposure to the sun, although they can follow [sunburn](#) or other irritating skin conditions including [dermatitis](#).

[Skin cancers](#) are sometimes difficult to tell apart from seborrhoeic keratoses, so if you are concerned or unsure about any skin lesion consult your doctor.

Very rarely, eruptive seborrhoeic keratoses may denote an underlying internal malignancy. The syndrome is known as the [sign of Leser-Trelat](#).

Other types of seborrhoeic keratosis

Variants of seborrhoeic keratoses include:

- Some solar [lentigines](#): flat brown marks in sun exposed areas
- Stucco keratoses: numerous small dry grey stuck-on lesions usually found on lower legs and feet
- [Dermatosis papulosa nigra](#): numerous brown warty papules on face, neck and chest of dark-skinned individuals
- Irritated seborrhoeic keratosis: inflamed lesion, often red and crusted; may resemble a skin cancer
- [Lichenoid keratosis](#): resolving keratosis or lentigo, often pink or grey-coloured

Benign keratoses



Stucco keratoses



Dermatosis papulosa nigra



Irritated seborrhoeic keratosis

Treatment

Seborrhoeic keratoses can easily be removed. The usual reason for removing a seborrhoeic keratosis is your wish to get rid of it. For example it may be unsightly, itch or rub against your clothes. Occasionally your doctor may recommend its removal because of uncertainty of the correct diagnosis.

Methods used to remove seborrhoeic keratoses include:

- [Cryotherapy](#) (liquid nitrogen) for thinner lesions
- [Curettage & cautery](#)
- [Laser surgery](#)
- [Shave biopsy](#) (shaving off with a scalpel)

Related information

On DermNet NZ:

- [Ageing skin](#)
- [Brown marks and freckles](#)
- [Benign keratinocytic and adnexal tumours](#) – common skin lesions course

Other websites:

- [Stucco keratosis](#) – emedicine dermatology, the online textbook
- [Seborrheic keratosis](#) – emedicine dermatology, the online textbook
- [Seborrhoeic Warts](#) – British Association of Dermatologists

Books about skin diseases:

See the [DermNet NZ bookstore](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1997. Last updated 27 Feb 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

ALDARA – TREATS THE AKs YOU CAN SEE,
AND THE AKs YOU CAN'T



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Skin lesions, tumours and cancers](#)

Solar keratoses

Rough scaly spots on sun-damaged skin are called solar keratoses. They are also known as "actinic keratoses". They should be distinguished from other kinds of keratosis (scaly spot) such as [seborrhoeic keratosis](#), [porokeratosis](#) and [keratosis pilaris](#).

What are solar keratoses?

Solar keratoses are a reflection of abnormal skin cell development due to exposure to ultraviolet radiation. They are considered precancerous.

They appear as multiple flat or thickened, scaly or warty, skin coloured or reddened lesions. A keratosis may develop into a cutaneous horn.

They are very common on sites repeatedly exposed to the sun especially the backs of the hands and the face, most often affecting the nose, cheeks, upper lip, temples and forehead. On the lips they are often called actinic or [solar cheilitis](#). They are especially common in fair-skinned persons or those who have worked outdoors for long periods without skin protection. Sun-damaged skin is also dry, discoloured and wrinkled.

Solar keratoses





Many more images of solar keratoses ...

- [Keratoses on the face](#)
- [Keratoses on the scalp](#)
- [Keratoses on the hands](#)
- [Keratoses on the legs](#)
- [Keratoses treated with imiquimod](#)

Are solar keratoses dangerous?

Solar keratoses themselves are harmless, but they can be uncomfortable and unsightly.

The main concern is that solar keratoses can give rise to a type of [skin cancer](#) called [squamous cell carcinoma](#). The risk of squamous cell carcinoma occurring in a patient with more than ten solar keratoses is about 10 to 15%.

Solar keratoses are usually removed because they are unsightly or uncomfortable, or because of the risk that skin cancer may develop in them. If a solar keratosis becomes thickened or ulcerated get it checked; it may have become a skin cancer. Squamous cell cancers often look like "volcanoes" erupting within the skin.

People with keratoses should visit their doctor regularly for examination as they are also at risk of developing [basal cell carcinoma](#) and [malignant melanoma](#). Referral to a [dermatologist](#) may be necessary.

Treatment

Treatment of a solar keratosis requires removal of the defective skin cells. New skin then forms from deeper cells which have escaped sun damage.

It is not practical to remove all keratoses in those with very extensive sun damage; in such cases it is important to get rid of thickened or tender lesions as these are the ones at greatest risk of progressing to skin cancer.

Treatments may include:

- **Cryotherapy**
Freezing with [liquid nitrogen](#) causes blistering and shedding of the sun damaged skin. Keratoses treated on the face peel off after about 10 days, those on the hands in about 3 weeks, but those on the legs can take as long as twelve weeks to heal. A light freeze usually leaves no scar, but longer freeze times (necessary for thicker lesions or early skin cancers) result in a pale mark or scar. The lesions may recur in time, in which case they may be retreated by the same or a different method.
- **Curettage & cautery**
[Curettage & cautery](#) may be preferred with thicker keratoses, and is a common method of removing early squamous cell cancers. A specimen is sent for pathological examination. Curettage is the removal of a lesion by scraping it with a sharp instrument. Cautery or diathermy burns the keratoses off and prevents bleeding. A scab forms which heals over a few weeks, leaving a small scar.
- **Excision**

Cutting the lesion out ([excision biopsy](#)) makes sure the lesion has been completely removed, confirmed by pathological examination. This is sometimes important if a lesion may be cancerous. Usually the surgical wound is sutured (stitched). The sutures are removed after a few days, the time depending on the size and location of the lesion. The procedure leaves a permanent scar.

- **5-Fluorouracil cream**

[5-Fluorouracil cream](#) (5-FU, Efudix) is most useful when there are many keratoses on the face. The cream is applied onto facial skin once or twice daily for two to four weeks. The treated areas become red, raw and uncomfortable. Healing starts when the cream is discontinued, and the eventual result is usually excellent.

- **Imiquimod**

[Imiquimod](#) is an immune response modifier in a cream base. It is applied to areas affected by solar keratoses two or three times weekly for four to sixteen weeks. It causes an inflammatory reaction, which is maximal at about three weeks and then gradually settles down with continued use. The results are variable, but generally excellent.

- **Photodynamic therapy**

[Photodynamic therapy](#) (PDT) involves applying a photosensitizer (a porphyrin chemical) to the affected area prior to exposing it to a strong source of visible light. The treated area develops a "burn" and then heals over a couple of weeks or so. [Metvix PDT](#) is available in New Zealand.

- **Diclofenac gel**


Diclofenac in hyaluran gel has been used successfully to treat solar keratoses, and is well tolerated. This product is not available in New Zealand (August 2005).

Prevention of keratoses

Solar keratoses may be prevented by protecting skin from ultraviolet radiation. If already present, keratoses may even improve with regular application of broad spectrum [sunscreen](#) to affected areas every day. [Sun protection](#) is vital for all fair skinned people working or enjoying themselves outdoors.

Related information

References:

-  [Guidelines for the management of Actinic Keratoses \(D de Berker, JM McGregor and BR Hughes\) BJD, Vol. 156, No. 2, February 2007 \(p222-230\) – British Association of Dermatologists](#)

On DermNet NZ:

- [Skin cancer](#)
- [Bowen disease](#) (squamous cell carcinoma in situ)
- [Squamous cell carcinoma](#)
- [Basal cell carcinoma](#)

Other websites:

- [ActinicKeratosesNet](#) American Academy of Dermatology
- [Actinic keratoses](#) – emedicine dermatology, the online textbook
- [Actinic keratosis](#) – British Association of Dermatologists

Books about skin diseases:

See the [DermNet NZ bookstore](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Last updated 27 Feb 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).



DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Skin reactions to external agents](#)

Skin problems from stomas

Worldwide, millions of individuals have stomas. Skin problems relating to the stoma are extremely common.

What is a stoma?

A stoma is a surgically created opening of the intestinal or urinary tract on to the body surface. Stomas most often open via a short spout onto the surface of the abdominal wall. They may be permanent or temporary (another surgical operation is required to rejoin the bowel).

- **Ileostomy** is an opening of the ileum (small bowel) and can be an end or loop stoma, most often placed in the lower right abdomen
- **Colostomy** is an opening of the colon (large bowel) and can be end or loop stoma, most often placed in the lower left abdomen
- **Urostomy** enables urine to be excreted, is always an end stoma and may be situated on the center, the left or the right side of the lower abdomen, the perineum or the flank. Urostomies include nephrostomy, ureterostomy, cystostomy, urethrostomy, ileal conduit and continent pouch/diversion depending on the site of the diversion and the type of surgery.

Why is a stoma necessary?

Common reasons for an ileostomy include:

- Inflammatory bowel disease (ulcerative colitis, Crohn's disease)
- Intestinal polyps
- Bowel cancer
- Bowel infection (e.g. peritonitis)

Common reasons for a colostomy include:

- Bowel cancer resulting in obstruction or bleeding
- Inflammatory bowel disease
- Congenital developmental problems
- Bowel infection
- Trauma

Common reasons for a urostomy include:

- Congenital conditions e.g. spina bifida
- Cancer
- Obstruction from stones (calculus)
- Trauma

What are the complications of a stoma?

Early complications may include:

- Inadequate blood supply (ischaemia)
- Retraction of the bowel back into the abdomen
- Separation of the bowel mucosa from the skin (dehiscence)
- Infection
- Bleeding
- An undesired passage between the bowel and the skin (fistula)
- Prolonged paralysis of the bowel (ileus), which if not treated may cause a swollen abdomen, vomiting, dehydration, electrolyte imbalance, kidney failure

Later complications may include:

- Prolapse of the bowel out onto the skin
- Scarring and narrowing of the stoma (stenosis)
- Leaking of bowel contents onto the skin resulting in irritation, erosion and digestion of the skin
- Bowel obstruction
- Excessive protrusion of bowel under the skin surrounding the stoma (hernia)
- Persistent infection
- Skin disorders ([see below](#))
- Varicose veins around the stoma
- High output of fluid from an ileostomy, causing dehydration and electrolyte imbalance
- Constipation or diarrhoea
- Cancer

Stoma appliances

A specialist nurse will advise on the most appropriate appliance and will support a patient adjusting to life with a stoma.

The pouch may be pre-cut, or require cutting to the exact size and shape of the stoma to protect the surrounding skin from damage and to prevent leakage. The flange in contact with the skin is made of sticky hydrocolloid. The pouch is made of clear or flesh-coloured plastic.

Colostomy appliances may be a closed-end bag which can be changed once or twice each day, or an open-ended bag that may be drained as required. Ileostomy bags are drainable and changed every two or three days. Urostomy pouches

may also be drained as required and changed every two or three days. Bags may be one-piece or two-piece, closed or drainable.

Carefully designed products have the following properties:

- Comfortable soft low-irritant materials that don't rustle
- Adhesives that stick to irregular body contours without leaks
- A bag that is waterproof
- Odour-free, with integrated charcoal filter

Skin care

- Cleanse the skin around the stoma with water alone, using a cotton wipe. If a [cleanser](#) is used, it should be thoroughly rinsed away. Avoid oily and perfumed products.
- Shave hairy areas about once a week, using a clean razorblade.
- If required, cover raw areas of skin with a thin hydrocolloid wafer before applying the stoma bag.
- If required, use barrier films, pastes or powder to protect the skin and manage leaks.

Skin infection

Micro-organisms may proliferate because the stoma is warm, humid and soiled. They may colonise the stoma without causing disease. True skin infection is more likely if the patient suffers from general ill-health or [diabetes](#), or takes immunosuppressive medication.

[Bacterial infections](#) are confirmed by swabs. They may present as:

- [Secondary infection](#) of a surgical wound
- Bacterial [folliculitis](#) or [boils](#)
- [Impetigo](#)
- [Cellulitis](#).

Cleansing with an [antiseptic](#) may be sufficient. Treatment with specific oral [antibiotics](#) may be necessary to clear more severe infection.

[Fungal infections](#) may be confirmed by [skin scrapings](#). They may include:

- [Thrush](#) ([candida](#))
- [Tinea corporis](#) ([dermatophyte](#) infection)
- [Pityriasis versicolor](#) ([malassezia](#))

[Viral infections](#) may include:

- [Herpes simplex](#) (cold sores)
- [Viral warts](#)
- [Molluscum contagiosum](#)

Inflammatory skin disease

The skin around a stoma may become inflamed (red, swollen, painful) because the stoma is leaking, because of an underlying skin disease, or because of infection.

Papules (small bumps) and nodules (large ones) can develop due to ongoing irritation, granulation tissue, viral warts, cancer or [Crohn's disease](#).

Ulceration may be due to trauma (surgery, appliance, clothing), wound breakdown ([pyoderma gangrenosum](#), malnutrition) or skin disease.

Skin rashes around stomas



Irritant contact dermatitis



Spreading autosensitisation reaction Pyoderma gangrenosum



Irritant contact dermatitis

Unfortunately many people with a stoma suffer from skin irritation from time to time. The main causes are:

- Skin bathed in stoma effluent (bowel content or alkaline urine)
- Skin stripped by repeatedly removing the appliance
- Occlusion and humidity
- Friction or pressure from the appliance or clothing
- Pre-existing [sensitive skin](#) or dermatitis (especially atopic eczema)
- Application of irritating chemicals such as detergents, deodorisers or bleach in wipes and cleansers

The appliance may leak for the following reasons:

- It may be the wrong size
- It may be incorrectly sited
- There may be skin folds due to obesity or scarring from surgery
- Excessive sweating prevents sticking
- Underlying skin rash prevents it sticking to the skin properly
- The effluent may be excessive
- It may corrode the hydrocolloid

The result is [irritant contact dermatitis](#) i.e. red papules (small bumps) and plaques (larger thickened patches) and scaling. The dermatitis may affect a crescent area below the appliance or affect the whole area in contact with it. It may be very sore or itchy.

Treatment of the dermatitis may include:

- Modification of the appliance to improve the fit
- Filler paste to achieve a flat surface on which to stick the bag
- Hydrocolloid dressing under the bag
- Sucralfate powder dusted onto erosions
- Roll-on [antiperspirant](#) to reduce sweat
- [Topical steroid](#) ([see below](#))

Prolonged irritation may result in over-granulation (moist red thickened areas), warty papules and pseudoepitheliomatous hyperplasia (cancer-like growths). Treatment may include:

- Acidification of the urine and acetic acid compresses (dilute vinegar)
- Chemical cautery (silver nitrate stick) or [cryotherapy](#) (freezing) to destroy granulation tissue

- Surgery to refashion the stoma (rarely required).

Allergic contact dermatitis

Allergy to acrylic adhesive or resin components of the appliance is rare. The appearance is similar to irritant contact dermatitis but [allergic contact dermatitis](#) affects all areas in contact with the appliance, and may also spread more widely to surrounding or distant skin.

Allergy may also be due to a deodoriser, [fragrance](#) or preservative such as [parabens](#), [kathon cg](#) or [imidazolidinyl urea](#) in a cleanser. If dermatitis is very persistent, [patch tests](#) should be performed to relevant allergens such as the standard series, glues and plastics, preservatives, fragrances and medicaments.

Granulomas

Granulomas are lumpy lesions due to inflammation in the dermis. Stomal granulomas may be due to:

- Granulation tissue (poor wound healing and infection)
- Bowel metaplasia (stomal skin morphing into bowel tissue)
- Crohn's disease (a type of inflammatory bowel disease)

Colour changes

The skin surrounding the stoma may be discoloured.

- Brown colour is usually due to [postinflammatory pigmentation](#) and fades in time
- Red, pink or mauve colours may be due to the growth of new blood vessels
- Other coloured stains may be due to urinary compounds

Psoriasis

[Psoriasis](#) presents as patches of scaly red skin. It may arise around a stoma in patients who have psoriasis in other sites or who have a genetic predisposition to it. It is particularly common in patients who have inflammatory bowel disease. Stripping off the skin when the appliance is changed may provoke psoriasis (this is known as the Koebner reaction).

Plaques of psoriasis are generally sharply defined. They tend to extend beyond the stoma and may be more prominent outside it because the moist environment under hydrocolloid may be beneficial in treating psoriasis.

Psoriasis relating to a stoma may be treated with topical steroids ([see below](#)). Occasionally other treatments such as [phototherapy](#), [methotrexate](#) or [ciclosporin](#) may be necessary.

Pyoderma gangrenosum

[Pyoderma gangrenosum](#) is an painful ulcerating skin disorder. It is sometimes associated with inflammatory bowel disease or cancer. The ulcers may be triggered by an injury to the skin, such as trauma from a tight appliance or surgery. This is known as pathergy.

- The ulcers may be shallow or deep
- They have a bluish undermined and ragged edge
- Surrounding skin tends to be red and swollen
- Healing ulcers result in cribriform scars (these appear to have small holes like a sieve).

Treatment may include topical steroids ([see below](#)), topical [tacrolimus](#), [systemic steroids](#), ciclosporin, [dapsone](#) and [minocycline](#). Further surgery should be avoided if possible, as it may provoke larger ulcers.

Seborrhoeic dermatitis

[Seborrhoeic dermatitis](#) may appear similar to irritant dermatitis or psoriasis, causing a scaling pink rash around the stoma as well as other typical sites (scalp, behind ears, nose crease, chest, under arms and navel).

Treatment involves [antifungal lotions](#) and occasional courses of topical steroids ([see below](#)).

Other skin conditions

The following skin conditions should be considered if a rash affects a stoma or there is delayed wound healing:

- [Seborrhoeic keratoses](#) (warty lesions)
- Cancer secondaries ([metastases](#))
- [Crohn's disease](#) (ulcers or cobblestone granulomas)
- [Malnutrition](#) (red cracks and sores)
- [Cutaneous vasculitis](#) (purple bumps called [purpura](#))
- Drug eruptions
- [Radiotherapy-related dermatitis](#)
- Surgical complications

Topical corticosteroids

[Topical steroid](#) lotions or scalp solutions may be used directly onto the stoma when the bag is changed to treat inflammatory skin conditions including dermatitis, psoriasis and pyoderma gangrenosum.

- To avoid stinging, the solution can be applied onto the adhesive barrier of the stoma bag, and allowed to dry before the bag is put onto the skin.
- Creams and ointments are usually not practical as the appliance will not stick.
- If the desired preparation is only available in a cream formulation, it can be applied under a hydrocolloid or vapour permeable membrane, and the appliance can be stuck onto this.
- A paste formulation such as triamcinolone acetonide in orabase may be used to fill an ulcer.
- The topical steroid may be applied once daily for up to 3 to 4 weeks.
- If necessary, the topical steroid can be applied once each week as on-going treatment.

Related information

References:

- Abdominal stomas and their skin disorders; an atlas of diagnosis and management. Eds Calum Lyon, Amanda Smith. Martin Dunitz 2001

On DermNet NZ:

- [Synthetic wound dressings](#)

Other websites:

- [Ostomy Wound Management](#) Journal
- [Convatec Ostomy Care](#)
- [Stomas of the Small and Large Intestine](#) – emedicine

Books about skin diseases:

See the [DermNet NZ bookstore](#)

Author: [Dr Amanda Oakley](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 2006. Last updated 05 Apr 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).







DermNet NZ

DermNet NZ thanks its sponsors for their support



Advertisement

[Facts](#) about skin from the [New Zealand Dermatological Society Incorporated](#). Topic index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[DermNetNZ](#) [Contents](#) [Topics A-Z](#) [CME](#) [Find NZ dermatologist](#) [News](#) [About us](#) [Contact us](#) [Glossary](#)

[Home](#) | [Skin pigmentation](#)

Vitiligo

Vitiligo is an autoimmune disease in which pigment cells (melanocytes) are destroyed, resulting in irregularly shaped white patches on the skin.

Any part of the body may be affected. Common sites are exposed areas (face, neck, eyes, nostrils, nipples, navel, genitalia), body folds (armpits, groin), sites of injury (cuts, scrapes, burns) and around pigmented moles ([halo naevi](#)).

The hair may also go grey early on the scalp, eyebrows, eyelashes and body. White hair is called 'poliosis'. The retina may also be affected.

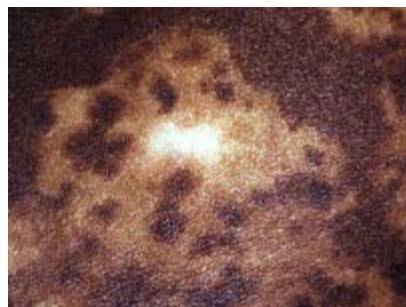


Vitiligo





Mucosal vitiligo



Trichrome vitiligo



Poliosis

Who is prone to vitiligo?

Vitiligo affects at least 1% of the population, and occurs in all races. In half of sufferers, pigment loss begins before the age of 20. In one fifth, other family members also have vitiligo.

Even though most people with vitiligo are in good general health, they face a greater risk of having other autoimmune diseases such as diabetes, thyroid disease, pernicious anaemia (B12 deficiency), [Addison's Disease](#) (adrenal gland disease) and [alopecia areata](#) (round patches of hair loss).

What is the cause of vitiligo?

Melanin is the pigment that determines the colour of skin, hair, and eyes. It is produced in cells called melanocytes. If melanocytes cannot form melanin or if their number decreases, skin colour will become progressively lighter.

The cause of vitiligo is not known. It sometimes follows physical injury such as sunburn, or emotional stress. There are three theories on the cause of vitiligo:

- The pigment cells are injured by abnormally functioning nerve cells.
- There may be an autoimmune reaction against the pigment cells (the body may destroy its own tissue, which it perceives as foreign).
- Autotoxic theory - the pigment cells are self-destructive.

The severity of vitiligo differs with each individual. Light skinned people usually notice the pigment loss during the summer as the contrast between the affected skin and sun tanned skin becomes more distinct. People with dark skin may observe the onset of vitiligo any time. In a severe case pigment may be lost from the entire body. The eyes do not change colour. There is no way to predict how much pigment an individual will lose.

The degree of pigment loss can vary within each vitiligo patch which means that there may be different shades of brown in a vitiligo patch. This is called 'trichrome'. A border of darker skin may circle an area of light skin.

Vitiligo frequently begins with a rapid loss of pigment which may be followed by a lengthy period when the skin colour does not change. Later, the pigment loss may begin again. The loss of colour may continue until, for unknown reasons, the process stops. Cycles of pigment loss followed by periods of stability may continue indefinitely.

Other causes of white skin ([leukoderma](#)) include severe trauma, burns, and deep skin infections.

Protection against injury

Those prone to vitiligo should be careful to minimise skin injury as it is common for healing to result in a new white patch at the site. The injury might be a cut, a graze, an area prone to rubbing. It has been reported to arise where jewellery or clothing items irritate the skin.

Protection against sun exposure

The white skin needs [sun protection](#) because it can only burn, it cannot tan. The normal skin also needs protecting to prevent sunburn (which could cause spreading of the vitiligo), and to reduce the contrast between the normal and the white skin.

- Wear [protective clothing](#).
- Stay out of the sun at peak periods.
- Apply [sunscreen](#) (Sun Protection Factor 30+).

Sunburn in vitiligo



Images supplied by Dr Shahbaz A. Janjua

Use of cosmetics

- Cosmetics are helpful to disguise the vitiligo ([cosmetic camouflage](#)). Dyes, stains and make-ups can be applied and with specialist help the results can be very satisfactory.
- [Dihydroxyacetone](#)-containing "tan without sun" products; take care not to apply to the normally tanned skin because this will also look darker.
- Water-resistant concealing make-up.

Treatment

Treatment is currently not very satisfactory.


- [Topical steroid](#) cream. A potent anti-inflammatory cortisone cream may reverse the process if applied to the affected areas for a few weeks in their early stages.
- Calcineurin inhibitors such as topical [pimecrolimus](#) and [tacrolimus](#) have recently been shown to be safe and effective, and is especially useful on the face and neck where strong steroid creams may cause skin thinning.
- [Narrowband UVB phototherapy](#) is helpful in many patients, particularly in combination with calcineurin inhibitors, and perhaps with [calcipotriol](#) cream (usually used in [psoriasis](#)).
- [PUVA](#). This form of light treatment requires the patient to take a psoralen medicine and then be exposed to ultraviolet light (UVA). Gradual but partial repigmentation may results. Hands and feet respond poorly, faces and trunks do better. When the treatment is stopped, some of the pigment disappears again. PUVA takes less than five minutes twice weekly, and is continued for up to two years. PUVA is unsuitable for children or very fair skinned people. The pigment loss should have been present for less than 5 years.
- Surgical treatment. Experimentally some centres are removing the top layer of skin by various techniques (including dermabrasion or sandpapering) and replacing it with skin with normal pigmentation from another site. Some researchers have used the patient's own melanocytes grown in tissue culture. Good results are reported, especially if the vitiligo is stable.

Depigmentation therapy

If a dark skinned person has vitiligo affecting a large part of the exposed areas, he or she may wish to undergo depigmentation. A cream containing monobenzyl ether of hydroquinone is applied to the skin. This causes all the skin to lose its pigment. Its effect is usually permanent.

Related information

References:

-  [Guidelines for the management and diagnosis of vitiligo \(DJ Gawkrödger, AD Ormerod, L Shaw, I Mauri-Sole, ME Whitton, MJ Watts, AV Anstey, J Ingham and K Young\). BJD, Vol. 159, No. 5, November 2008 \(p1051-1076\)](#)

On DermNet NZ:

- [Leukoderma](#)
- [Skin pigmentation](#)

Other websites:

- [Vitiligo](#) – Medline Plus
- [National Vitiligo Foundation Inc.](#)
- [Dr Kahn's surgical method](#) for repigmentation
- [Vitiligo](#) – emedicine dermatology, the online textbook
- [Vitiligo](#) – British Association of Dermatologists

Books:

See the [DermNet NZ bookstore](#)

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a dermatologist for advice.

Created 1999. Last updated 27 Feb 2010 . © 2011 [NZDSI](#). You may copy for personal use only. Please refer to our [disclaimer and copyright policy](#).

Question 1 of 131



A group of 60 patients with a history of medial epicondylitis is matched to a group of 60 control patients with no history of elbow problems. Thirty of the patients who've had medial epicondylitis had played golf before compared to only 10 in the control group.

What is the odds ratio of developing medial epicondylitis for people who play golf?

- A. 0.3
- B. 3
- C. 5
- D. 2.5
- E. 3.33



Question stats

A	<div></div>	16.6%
B	<div></div>	34.4%
C	<div></div>	33.5%
D	<div></div>	9%
E	<div></div>	6.5%

33.5% of users answered this question correctly

Session score = 0%

Remember to calculate the odds, rather than risk, initially:

Odds of patient with medial epicondylitis having played golf = $30 / 30 = 1$

Odds of the control group having played golf = $10 / 50 = 0.2$

The odds ratio therefore = $1 / 0.2 = 5$

Odds and odds ratio

Odds are a ratio of the number of people who incur a particular outcome to the number of people who do not incur the outcome. The odds ratio may be defined as the ratio of the odds of a particular outcome with experimental treatment and that of control.

Odds ratios are the usual reported measure in case-control studies. It approximates to relative risk if the outcome of interest is rare.

For example, if we look at a trial comparing the use of paracetamol for dysmenorrhoea compared to placebo we may get the following results

	Total number of patients	Achieved = 50% pain relief
Paracetamol	60	40
Placebo	90	30

The odds of achieving significant pain relief with paracetamol = $40 / 20 = 2$

The odds of achieving significant pain relief with placebo = $30 / 60 = 0.5$

Therefore the odds ratio = $2 / 0.5 = 4$

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

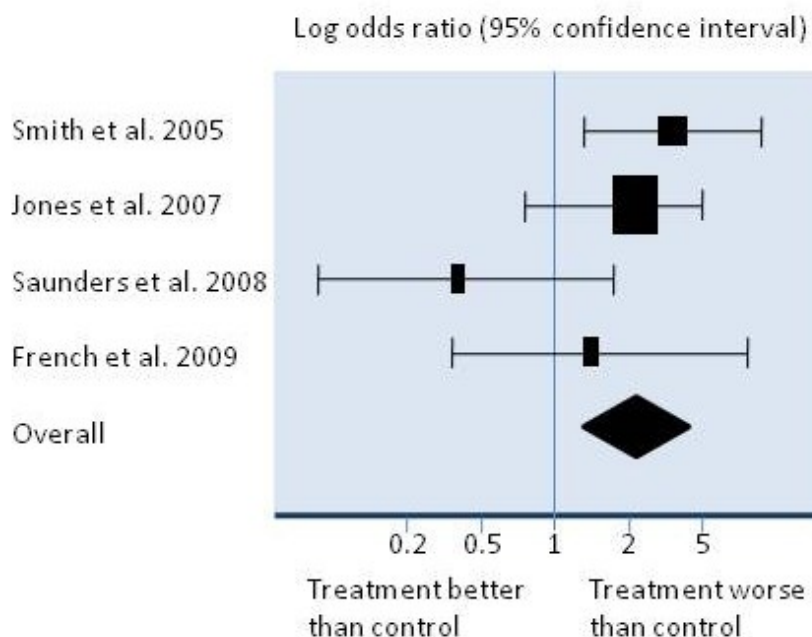
Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 2 of 131



A meta-analysis examines whether giving a new dietary supplement to patients who've recently had a myocardial infarction can help prevent a further attack. The meta-analysis consists of four randomised controlled trials and is summarised below:



Question stats

A	3.7%
B	4.2%
C	20.6%
D	3.2%
E	68.3%

68.3% of users answered this question correctly

Session score = 0%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

What is the most appropriate interpretation of the data?

- There is publication bias in studies looking into this question
- There is a non-significant trend that taking the supplement reduces the chance of a further myocardial infarctions
- There is a non-significant trend towards no benefit from taking the supplement in terms of reducing further myocardial infarctions
- Taking the supplement reduces the chance of a further myocardial infarctions
- Taking the supplement increases the chance of a further myocardial infarction**



The meta-analysis of the results, represented by the diamond, is clear from the no effect line (odds ratio of 1) and shows a significant increase in the chance of a further myocardial infarction.

Forest plots

Forest plots are usually found in meta-analyses and provide a graphical representation of the strength of evidence of the constituent trials.

The name of the trials is listed down the left hand side, usually in chronological order. On the right hand side the results of the studies are shown as squares centred on the point estimate of the result of each trial. The size of the square is proportional to the weight of the study in the meta-analysis. The line running through the square shows the confidence interval, usually at 95%. Beneath the individual trials is the summary result (i.e. The result of the meta-analysis) represented by a diamond.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 3 of 131



As part of a research project you are trying to ascertain whether the use of dummies in infants is linked to sudden infant death syndrome. What is the most appropriate form of study design?

- A. Randomised controlled trial
- B. Cross-over trial
- C. Cross-sectional survey
- ✓ D. Case-control study
- E. Cohort study

As sudden infant death syndrome is relatively rare a case-control design is more appropriate than a cohort study.

Study design

The following table highlights the main features of the main types of study:

Randomised controlled trial	<p>Participants randomly allocated to intervention or control group (e.g. standard treatment or placebo)</p> <ul style="list-style-type: none"> • Practical or ethical problems may limit use
Cohort study	<p>Observational and prospective. Two (or more) are selected according to their exposure to a particular agent (e.g. medicine, toxin) and followed up to see how many develop a disease or other outcome.</p> <p>The usual outcome measure is the relative risk.</p> <ul style="list-style-type: none"> • Examples include Framingham Heart Study
Case-control study	<p>Observational and retrospective. Patients with a particular condition (cases) are identified and matched with controls. Data is then collected on past exposure to a possible causal agent for the condition.</p> <p>The usual outcome measure is the odds ratio.</p> <ul style="list-style-type: none"> • Inexpensive, produce quick results • Useful for studying rare conditions • Prone to confounding
Cross-sectional survey	<p>Provide a 'snapshot', sometimes called prevalence studies</p> <ul style="list-style-type: none"> • Provide weak evidence of cause and effect

Rate question:

Question stats

A	8.8%
B	0.9%
C	9.3%
D	50.8%
E	30.3%

50.8% of users answered this question correctly

Session score = 0%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 4 of 131



You are reviewing a new study on the benefit of omega-3 fish oils in patients with established ischaemic heart disease. What does the power of the study equate to?

- A. = 1 / p value
- B. = standard deviation / square root of sample size
- C. = 1 - probability of making a type II error
- D. = 1 - probability of making a type I error
- E. = 1 / probability of making a type I error



Power = 1 - the probability of a type II error

Question stats

A		21.4%
B		19.2%
C		38.6%
D		12.9%
E		7.8%

38.6% of users answered this question correctly

Session score = 0%

Significance tests

A null hypothesis (H_0) states that two treatments are equally effective (and is hence negatively phrased). A significance test uses the sample data to assess how likely the null hypothesis is to be correct.

For example:

- 'there is no difference in the prevalence of colorectal cancer in patients taking low-dose aspirin compared to those who are not'

The alternative hypothesis (H_1) is the opposite of the null hypothesis, i.e. There is a difference between the two treatments

The **p value** is the probability of obtaining a result by chance at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. It is therefore equal to the chance of making a type I error (see below).

Two types of errors may occur when testing the null hypothesis

- type I: the null hypothesis is rejected when it is true - i.e. Showing a difference between two groups when it doesn't exist, a false positive. This is determined against a preset significance level (termed alpha). As the significance level is determined in advance the chance of making a type I error is not affected by sample size. It is however increased if the number of end-points are increased. For example if a study has 20 end-points it is likely one of these will be reached, just by chance.
- type II: the null hypothesis is accepted when it is false - i.e. Failing to spot a difference when one really exists, a false negative. The probability of making a type II error is termed beta. It is determined by both sample size

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

and alpha

	Study accepts H_0	Study rejects H_0
Reality H_0		Type 1 error (alpha)
Reality H_1	Type 2 error (beta)	Power (1 - beta)

The power of a study is the probability of (correctly) rejecting the null hypothesis when it is false

- power = 1 - the probability of a type II error
- power can be increased by increasing the sample size

Rate question:

Question 5 of 131



A rapid finger-prick blood test to help diagnosis deep vein thrombosis is developed. Comparing the test to current standard techniques a study is done on 1,000 patients:

	DVT present	DVT absent
New test positive	200	100
New test negative	20	680

What is the specificity of the new test?

- A. 680/880
- B. 200/220
- C. 680/780
- D. 680/700
- E. 200/300



Question stats

A	3.9%
B	15.4%
C	53.7%
D	16.2%
E	10.8%

53.7% of users answered this question correctly

Session score = 0%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Specificity = true negatives / (true negatives + false positives)

$$= 680 / (680 + 100)$$

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	TP / (TP + FN)	Proportion of patients with the condition who have a positive test result
Specificity	TN / (TN + FP)	Proportion of patients without the condition who have a negative test result
Positive predictive value	TP / (TP + FP)	The chance that the patient has the condition if the diagnostic test is positive

Negative predictive value	$TN / (TN + FN)$	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	$\text{sensitivity} / (1 - \text{specificity})$	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	$(1 - \text{sensitivity}) / \text{specificity}$	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 6 of 131



A new oral-hypoglycaemic is being developed. A number of different study types are considered to demonstrate efficacy in reducing the HbA1c. Which one of the following study designs would require the most patients to produce a significant result?

- A. Equivalence trial
- B. Non-inferiority trial
- ✓ C. Superiority trial
- D. Placebo-controlled trial
- E. Study design would not affect the number of patients required

As a superiority trial compares the new drug with an existing treatment, which would also lower HbA1c, a large sample size is required to demonstrate a significant difference.

Study design: new drugs

When a new drug is launched there are a number of options available in terms of study design. One option is a placebo controlled trial. Whilst this may provide robust evidence it may be considered unethical if established treatments are available and it also does not provide a comparison with standard treatments.

If a drug is therefore to be compared to an existing treatment a statistician will need to decide whether the trial is intended to show superiority, equivalence or non-inferiority:

- superiority: whilst this may seem the natural aim of a trial one problem is the large sample size needed to show a significant benefit over an existing treatment
- equivalence: an equivalence margin is defined (-delta to +delta) on a specified outcome. If the confidence interval of the difference between the two drugs lies within the equivalence margin then the drugs may be assumed to have a similar effect
- non-inferiority: similar to equivalence trials, but only the lower confidence interval needs to lie within the equivalence margin (i.e. -delta). Small sample sizes are needed for these trials. Once a drug has been shown to be non-inferior large studies may be performed to show superiority

It should be remembered that drug companies may not necessarily want to show superiority over an existing product. If it can be demonstrated that their product is equivalent or even non-inferior then they may compete on price or convenience.

Rate question:

Question stats

A	6.6%
B	4.6%
C	46.6%
D	25.3%
E	16.9%

46.6% of users answered this question correctly

Session score = 0%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

External links

[European Medicines Agency](#)

Further information on trial design

Questions 7 to 9 of 131



Theme: Statistical terms: descriptive statistics

- A 1
- B 2
- C 3
- D 4
- E 5
- F 6
- G 7
- H 8
- I 9
- J 10

You are reviewing the case notes of seven patients who have COPD. You record the number of exacerbations they have had in the past year as follows:
1,0,1,5,4,2,1

7. What is the mode?



1

8. What is the mean?



1

The correct answer is 2

9. What is the median value?



1

Question stats

Average score for registered users:

7		89.8%
8		79.5%
9		71.9%

Session score = 22.2%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Statistical terms: descriptive statistics

The table below gives a brief definition of commonly encountered terms:

--	--

Term	Description
Mean	The average of a series of observed values
Median	The middle value if series of observed values are placed in order
Mode	The value that occurs most frequently within a dataset
Range	The difference between the largest and smallest observed value

Rate question:

Question 10 of 131



You have been asked to investigate the potential benefit of setting up a service to help patients with multiple sclerosis in the local area. What is the most important factor when determining how many resources will be required?

- A. Incidence
- B. Bayesian factor
- C. **Prevalence**
- D. Denominator data
- E. P value



Question stats

A	9.4%
B	3.7%
C	83.4%
D	2%
E	1.4%

83.4% of users answered this question correctly

Session score = 20%

Incidence and prevalence

These two terms are used to describe the frequency of a condition in a population.

The **incidence** is the number of new cases per population in a given time period.

For example, if condition X has caused 40 new cases over the past 12 months per 1,000 of the population the annual incidence is 0.04 or 4%.

The **prevalence** is the total number of cases per population at a particular point in time.

For example, imagine a questionnaire is sent to 2,500 adults asking them how much they weigh. If from this sample population of 500 of the adults were obese then the prevalence of obesity would be 0.2 or 20%.

Relationship

- prevalence = incidence * duration of condition
- in chronic diseases the prevalence is much greater than the incidence
- in acute diseases the prevalence and incidence are similar. For conditions such as the common cold the incidence may be greater than the prevalence

Rate question:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 11 of 131



A study is carried out to assess the potential of hip protectors to reduce femoral neck fractures in elderly nursing home patients. The average age of the patients was 82 years. Over a two-year period 800 patients were recruited and assigned randomly either to the hip protector group or standard care group.

The results:

Hip protector group: 400 patients - 10 of whom had a femoral neck fracture over the two year period

Control group: 400 patients - 20 of whom had a femoral neck fracture over the two year period

What is the absolute risk reduction?



- A. 0.025
- B. 0.05
- C. 2
- D. 10
- E. 0.5

Absolute risk reduction = (Control event rate) - (Experimental event rate)

The absolute risk reduction = CER-EER, where:

Control event rate (CER) = (Number who had particular outcome with the control/ (Total number who had the control)

Experimental event rate (EER) = (Number who had particular outcome with the intervention) / (Total number who had the intervention)

CER = 20 / 400 = 1 / 20 = 0.05

EER = 10 / 400 = 1 / 40 = 0.025

ARR = CER - EER = 0.05 - 0.025 = 0.025

Numbers needed to treat and absolute risk reduction

Numbers needed to treat (NNT) is a measure that indicates how many patients would require an intervention to reduce the expected number of outcomes by one

It is calculated by $1/(\text{Absolute risk reduction})$ and is rounded to the next highest whole number

Experimental event rate (EER) = (Number who had particular outcome with the

Question stats

A	<div style="width: 43.4%;"></div>	43.4%
B	<div style="width: 7.5%;"></div>	7.5%
C	<div style="width: 13.9%;"></div>	13.9%
D	<div style="width: 12.7%;"></div>	12.7%
E	<div style="width: 22.4%;"></div>	22.4%

43.4% of users answered this question correctly

Session score = 18.2%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

intervention) / (Total number who had the intervention)

Control event rate (CER) = (Number who had particular outcome with the control/
(Total number who had the control)

Absolute risk reduction = CER-EER or EER-CER?

The absolute risk reduction (ARR) may be calculated by finding the absolute difference between the control event rate (CER) and the experimental event rate (EER). You will often either version of the above listed in different sources. In some ways it doesn't matter which you use as you will end up with the same answer but from a technical point of view:

- if the outcome of the study is undesirable then $ARR = CER - EER$
- if the outcome of the study is desirable then $ARR^* = EER - CER$

*this may more accurately be termed absolute benefit increase, rather than absolute risk reduction

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 12 of 131



A new drug designed to prevent exacerbations of genital herpes undergoes clinical trials. One hundred patients are given the new drug. During a three month period 10 of the patients have an episode of genital herpes. In the control group there are 300 patients who are given a placebo. In this group 50 people have an exacerbation during the same time period. What is the relative risk of having an exacerbation of genital herpes whilst taking the new drug?

- A. 0.8
- B. 0.2
- C. 1.66
- D. 0.6
- E. 0.06



Question stats

A	6.1%
B	11.6%
C	14.3%
D	56%
E	12%

56% of users answered this question correctly

Session score = 16.7%

Experimental event rate, EER = $10 / 100 = 0.10$

Control event rate, CER = $50 / 300 = 0.166$

Therefore the relative risk = $EER / CER = 0.1 / 0.166 = 0.6$

Relative risk

Relative risk (RR) is the ratio of risk in the experimental group (experimental event rate, EER) to risk in the control group (control event rate, CER)

To recap

- EER = rate at which events occur in the experimental group
- CER = rate at which events occur in the control group

For example, if we look at a trial comparing the use of paracetamol for dysmenorrhoea compared to placebo we may get the following results

	Total number of patients	Experienced significant pain relief
Paracetamol	100	60
Placebo	80	20

Experimental event rate, EER = $60 / 100 = 0.6$

Control event rate, CER = $20 / 80 = 0.25$

Therefore the relative risk = $EER / CER = 0.6 / 0.25 = 2.4$

If the risk ratio is > 1 then the rate of an event (in this case experiencing significant pain relief) is increased compared to controls. It is therefore

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

appropriate to calculate the relative risk increase if necessary (see below).

If the risk ratio is < 1 then the rate of an event is decreased compared to controls. The relative risk reduction should therefore be calculated (see below).

Relative risk reduction (RRR) or **relative risk increase (RRI)** is calculated by dividing the absolute risk change by the control event rate

Using the above data, $RRI = (EER - CER) / CER = (0.6 - 0.25) / 0.25 = 1.4 = 140\%$

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 13 of 131



What are funnel plots primarily used for?



- A. Demonstrate the heterogeneity of a meta-analysis
- B. **Demonstrate the existence of publication bias in meta-analyses**
- C. Provide a graphical representation of the relative risk results in a case-control study
- D. Provide a graphical representation of the relative risk results in a cohort study
- E. Provide a graphical representation of the probability of a patient experiencing a particular adverse effect

Funnel plots - show publication bias in meta-analyses

Funnel plot

A funnel plot is primarily used to demonstrate the existence of publication bias in meta-analyses. Funnel plots are usually drawn with treatment effects on the horizontal axis and study size on the vertical axis.

Interpretation

- a symmetrical, inverted funnel shape indicates that publication bias is unlikely
- conversely, an asymmetrical funnel indicates a relationship between treatment effect and study size. This indicates either publication bias or a systematic difference between smaller and larger studies ('small study effects')

Rate question:

Question stats

A		16.3%
B		57.2%
C		7.7%
D		11%
E		7.8%

57.2% of users answered this question correctly

Session score = 15.4%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 14 of 131



A cohort study is being designed to look at the relationship between smoking and breast cancer. What is the usual outcome measure in a cohort study?

- A. Odds ratio
- B. Experimental event rate
- C. Relative risk
- D. Absolute risk increase
- E. Numbers needed to harm



Cohort studies - relative risk

Question stats

A		25.1%
B		3.7%
C		61.8%
D		6.5%
E		2.9%

61.8% of users answered this question correctly

Session score = 14.3%

Study design

The following table highlights the main features of the main types of study:

Randomised controlled trial	<p>Participants randomly allocated to intervention or control group (e.g. standard treatment or placebo)</p> <ul style="list-style-type: none"> Practical or ethical problems may limit use
Cohort study	<p>Observational and prospective. Two (or more) are selected according to their exposure to a particular agent (e.g. medicine, toxin) and followed up to see how many develop a disease or other outcome.</p> <p>The usual outcome measure is the relative risk.</p> <ul style="list-style-type: none"> Examples include Framingham Heart Study
Case-control study	<p>Observational and retrospective. Patients with a particular condition (cases) are identified and matched with controls. Data is then collected on past exposure to a possible causal agent for the condition.</p> <p>The usual outcome measure is the odds ratio.</p> <ul style="list-style-type: none"> Inexpensive, produce quick results Useful for studying rare conditions Prone to confounding
Cross-sectional survey	<p>Provide a 'snapshot', sometimes called prevalence studies</p> <ul style="list-style-type: none"> Provide weak evidence of cause and effect

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 15 of 131



Which one of the following statements best describes a type II statistical error?

- A. The p value fails to reach statistical significance
- B. A study fails to reach an appropriate power
- C. The null hypothesis is rejected when it is true
- ☒ D. The null hypothesis is accepted when it is false
- E. The alternative hypothesis is rejected when it is false



Question stats

A	5.5%
B	7.2%
C	22.9%
D	61%
E	3.4%

61% of users answered this question correctly

Session score = 13.3%

Significance tests

A null hypothesis (H_0) states that two treatments are equally effective (and is hence negatively phrased). A significance test uses the sample data to assess how likely the null hypothesis is to be correct.

For example:

- 'there is no difference in the prevalence of colorectal cancer in patients taking low-dose aspirin compared to those who are not'

The alternative hypothesis (H_1) is the opposite of the null hypothesis, i.e. There is a difference between the two treatments

The **p value** is the probability of obtaining a result by chance at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. It is therefore equal to the chance of making a type I error (see below).

Two types of errors may occur when testing the null hypothesis

- type I: the null hypothesis is rejected when it is true - i.e. Showing a difference between two groups when it doesn't exist, a false positive. This is determined against a preset significance level (termed alpha). As the significance level is determined in advance the chance of making a type I error is not affected by sample size. It is however increased if the number of end-points are increased. For example if a study has 20 end-points it is likely one of these will be reached, just by chance.
- type II: the null hypothesis is accepted when it is false - i.e. Failing to spot a difference when one really exists, a false negative. The probability of making a type II error is termed beta. It is determined by both sample size and alpha

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

	Study accepts H_0	Study rejects H_0
Reality H_0		Type 1 error (alpha)

Reality H_1	Type 2 error (beta)	Power (1 - beta)
---------------	---------------------	------------------

The power of a study is the probability of (correctly) rejecting the null hypothesis when it is false

- power = 1 - the probability of a type II error
- power can be increased by increasing the sample size

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 16 to 18 of 131



Theme: Graphical representations of statistical data

- A** Forest plot
- B** Funnel plot
- C** Box plot
- D** Histogram
- E** Box-and-whisker plot
- F** Bar chart
- G** Stem plot
- H** Pearson survival plot
- I** Kaplan-Meier survival plot
- J** Scatter plot

Please match each one of the following descriptions to the appropriate type of graph:

- 16.** A plot of the estimate of a patient's survival showing decreasing survival with time



Forest plot

The correct answer is Kaplan-Meier survival plot

- 17.** A graphical display of continuous data where the values have been categorised into a number of categories



Forest plot

The correct answer is Histogram

- 18.** Used to demonstrate the existence of publication bias in meta-analyses



Forest plot

The correct answer is Funnel plot

Question stats

Average score for registered users:

16		44.8%
17		49.1%
18		73.7%

Session score = 11.1%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Graphical representations of statistical data

The table below gives a brief summary of the main types of graphs used to represent statistical data.

Box-and-whisker plot	Graphical representation of the sample minimum, lower quartile, median, upper quartile and sample maximum
Funnel plot	Used to demonstrate the existence of publication bias in meta-analyses
Histogram	A graphical display of continuous data where the values have been categorised into a number of categories
Forest plot	Forest plots are usually found in meta-analyses and provide a graphical representation of the strength of evidence of the constituent trials
Scatter plot	Graphical representation using Cartesian coordinates to display values for two variables for a set of data
Kaplan-Meier survival plot	A plot of the Kaplan-Meier estimate of the survival function showing decreasing survival with time

Rate question:

Question 19 of 131



Which one of the following defines the standard error of the mean?

- A. Square root (Standard deviation / number of patients)
- B. Number of patients / square root (mean)
- C. Number of patients / square root (standard deviation)
- ✓ D. **Standard deviation / square root (number of patients)**
- E. Standard deviation / square root (mean)

Standard error of the mean = standard deviation / square root (number of patients)

Standard error of the mean

The standard error of the mean (SEM) is a measure of the spread expected for the mean of the observations - i.e. how 'accurate' the calculated sample mean is from the true population mean

Key point

- $SEM = SD / \text{square root } (n)$
- where SD = standard deviation and n = sample size

Therefore the SEM gets smaller as the sample size (n) increases

A confidence interval for the mean can be calculated in a similar way to that for a single observation, i.e. The 95% confidence interval:

- lower limit = mean - (1.96 * SEM)
- upper limit = mean + (1.96 * SEM)

Rate question:

Question stats

A		12.7%
B		6.7%
C		11.4%
D		47.4%
E		21.8%

47.4% of users answered this question correctly

Session score = 10.5%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 20 of 131



You are performing a study of blood pressure readings in patients with chronic kidney disease. Assuming that the results are normally distributed, what percentage of values lie within two standard deviations of the mean blood pressure reading?



- A. 95.4%
- B. 5.3%
- C. 98.3%
- D. 10%
- E. 97.5%

Question stats

A	<div><div></div></div>	62.4%
B	<div><div></div></div>	1.4%
C	<div><div></div></div>	8.2%
D	<div><div></div></div>	4.1%
E	<div><div></div></div>	23.9%

62.4% of users answered this question correctly

Session score = 10%

Normal distribution

The normal distribution is also normal as Gaussian distribution or 'bell-shaped' distribution. It describes the spread of many biological and clinical measurements

Properties of the Normal distribution

- symmetrical i.e. mean = mode = median
- 68.3% of values lie within 1 SD of the mean
- 95.4% of values lie within 2 SD of the mean
- 99.7% of values lie within 3 SD of the mean
- this is often reversed, so that within 1.96 SD of the mean lie 95% of the sample values
- the range of the mean - (1.96 * SD) to the mean + (1.96 * SD) is called the 95% confidence interval, i.e. if a repeat sample of 100 observations are taken from the same group 95 of them would be expected to lie in that range

Standard deviation

- the standard deviation (SD) represents the average difference each observation in a sample lies from the sample mean
- SD = square root (variance)

Rate question:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 21 of 131



A case-control study is designed to investigate whether being exposed to passive smoking as a child is a risk factor for asthma. Two hundred patients with asthma are recruited. Of these 200, 40 report either one or both parents smoking in the house when they were a child. A further 200 controls who do not have asthma are recruited. Of these people 20 report that one or both parents smoked in the house. What is the odds ratio of developing asthma after being exposed to passive smoking as a child?



- A. 2.25
- B. 0.66
- C. 0.5
- D. 1.5
- E. 4

Question stats

A	<div style="width: 43.9%;"></div>	43.9%
B	<div style="width: 7.1%;"></div>	7.1%
C	<div style="width: 30.6%;"></div>	30.6%
D	<div style="width: 10.7%;"></div>	10.7%
E	<div style="width: 7.6%;"></div>	7.6%

43.9% of users answered this question correctly

Session score = 9.5%

Odds - remember a ratio of the number of people who incur a particular outcome to the number of people who do not incur the outcome

NOT a ratio of the number of people who incur a particular outcome to the total number of people

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

The odds of asthmatics being exposed to passive smoking is $40 / 160 = 1 / 4$

The odds of the controls being exposed to passive smoking is $20 / 180 = 1 / 9$

The odds ratio is therefore $1/4 / 1/9 = 9/4 = 2.25$

Odds and odds ratio

Odds are a ratio of the number of people who incur a particular outcome to the number of people who do not incur the outcome. The odds ratio may be defined as the ratio of the odds of a particular outcome with experimental treatment and that of control.

Odds ratios are the usual reported measure in case-control studies. It approximates to relative risk if the outcome of interest is rare.

For example, if we look at a trial comparing the use of paracetamol for dysmenorrhoea compared to placebo we may get the following results

	Total number of patients	Achieved = 50% pain relief
Paracetamol	60	40
Placebo	90	30

The odds of achieving significant pain relief with paracetamol = $40 / 20 = 2$

The odds of achieving significant pain relief with placebo = $30 / 60 = 0.5$

Therefore the odds ratio = $2 / 0.5 = 4$

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 22 of 131



A new test to screen for pulmonary embolism (PE) is used in 100 patients who present to the Emergency Department. The test is positive in 30 of the 40 patients who are proven to have a PE. Of the remaining 60 patients, only 5 have a positive test. What is the sensitivity of the new test?

- A. 8.33%
- B. 30%
- C. 40%
- D. 66.66%
- E. 75%



Question stats

A	3.8%
B	5%
C	3.7%
D	10.2%
E	77.3%

77.3% of users answered this question correctly

Session score = 9.1%

A contingency table can be constructed from the above data, as shown below:

	PE diagnosed	No PE
Test positive	30	5
Test negative	10	55

The sensitivity is therefore $30 / (30 + 10) = 75\%$

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	TP / (TP + FN)	Proportion of patients with the condition who have a positive test result
Specificity	TN / (TN + FP)	Proportion of patients without the condition who have a negative test result
Positive predictive value	TP / (TP + FP)	The chance that the patient has the condition if the diagnostic test is positive

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Negative predictive value	$TN / (TN + FN)$	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	$\text{sensitivity} / (1 - \text{specificity})$	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	$(1 - \text{sensitivity}) / \text{specificity}$	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 23 of 131



Which one of the following may be used to calculate the number needed to treat?



- A. **1 / (Absolute risk reduction)**
- B. (Absolute Risk Reduction) / (Number of people in trial)
- C. ((Control event rate) - (Experimental event rate)) / (Control event rate)
- D. 1 / (Relative risk)
- E. 1 / (Hazard ratio)

$NNT = 1 / (CER - EER)$, or $1 / \text{Absolute Risk Reduction}$

Numbers needed to treat and absolute risk reduction

Numbers needed to treat (NNT) is a measure that indicates how many patients would require an intervention to reduce the expected number of outcomes by one

It is calculated by $1/(\text{Absolute risk reduction})$ and is rounded to the next highest whole number

Experimental event rate (EER) = (Number who had particular outcome with the intervention) / (Total number who had the intervention)

Control event rate (CER) = (Number who had particular outcome with the control/ (Total number who had the control)

Absolute risk reduction = CER-EER or EER-CER?

The absolute risk reduction (ARR) may be calculated by finding the absolute difference between the control event rate (CER) and the experimental event rate (EER). You will often either version of the above listed in different sources. In some ways it doesn't matter which you use as you will end up with the same answer but from a technical point of view:

- if the outcome of the study is undesirable then $ARR = CER - EER$
- if the outcome of the study is desirable then $ARR^* = EER - CER$

*this may more accurately be termed absolute benefit increase, rather than absolute risk reduction

Rate question:

Question stats

A	<div style="width: 73.2%;"></div>	73.2%
B	<div style="width: 8.8%;"></div>	8.8%
C	<div style="width: 8.7%;"></div>	8.7%
D	<div style="width: 8.5%;"></div>	8.5%
E	<div style="width: 0.8%;"></div>	0.8%

73.2% of users answered this question correctly

Session score = 8.7%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 24 of 131


A study compares the sensitivity of two tests for colorectal cancer. The first test has a sensitivity of 85% whilst the second test has a sensitivity of 91%. What type of significance test should be used for comparing the two results?

- A. Wilcoxon matched-pairs
- B. Mann-Whitney test
- C. Student's t-test
- ✓ D. **Chi-squared test**
- E. Pearson's test

As percentages are being compared the chi-squared test should be used

Significance tests: types

The type of significance test used depends on whether the data is parametric (something which can be measured, usually normally distributed) or non-parametric

Parametric tests

- Student's t-test - paired or unpaired
- Pearson's product-moment coefficient - correlation

Non-parametric tests

- Mann-Whitney - unpaired data
- Wilcoxon matched-pairs - compares two sets of observations on a single sample
- chi-squared test - used to compare proportions or percentages
- Spearman, Kendall rank - correlation

Paired data refers to data obtained from a single group of patients, e.g. Measurement before and after an intervention. Unpaired data comes from two different groups of patients, e.g. Comparing response to different interventions in two groups

Rate question:
Question stats

A		6%
B		9.8%
C		18.7%
D		56.2%
E		9.4%

56.2% of users answered this question correctly

Session score = 8.3%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Questions 25 to 27 of 131



Theme: Screening test statistics

- A** $TN / (TN + FN)$
- B** $TP / (TP + FN)$
- C** Sensitivity / $(1 - \text{specificity})$
- D** $TP / (TP + FP)$
- E** $TN / (TN + FP)$
- F** $(1 - \text{sensitivity}) / \text{specificity}$

For each one of the following statistical terms listed below select the correct equation

TP = true positive; FP = false positive; TN = true negative; FN = false negative

25. Sensitivity



$TN / (TN + FN)$

The correct answer is $TP / (TP + FN)$

26. Positive predictive value



$TN / (TN + FN)$

The correct answer is $TP / (TP + FP)$

27. Specificity



$TN / (TN + FN)$

The correct answer is $TN / (TN + FP)$

Question stats

Average score for registered users:

25	<div></div>	75.5%
26	<div></div>	72.1%
27	<div></div>	68.7%

Session score = 7.4%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

--	--	--

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	TP / (TP + FN)	Proportion of patients with the condition who have a positive test result
Specificity	TN / (TN + FP)	Proportion of patients without the condition who have a negative test result
Positive predictive value	TP / (TP + FP)	The chance that the patient has the condition if the diagnostic test is positive
Negative predictive value	TN / (TN + FN)	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	sensitivity / (1 - specificity)	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	(1 - sensitivity) / specificity	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

Question 28 of 131



Which one of the following statements regarding relative risk is correct?



- A. Relative risk = 1 - absolute risk reduction
- B. **It is the usual outcome measure of cohort studies**
- C. Risk may be defined as the odds of an outcome happening
- D. Relative risk = 1 / odds ratio
- E. If the risk ratio is less than 1 then the rate of an event is increased compared to controls

Remember that risk and odds are different. If 20 patients die out of every 100 who have a myocardial infarction then the risk of dying is $20 / 100 = 0.2$ whereas the odds are $20 / 80 = 0.25$.

Relative risk

Relative risk (RR) is the ratio of risk in the experimental group (experimental event rate, EER) to risk in the control group (control event rate, CER)

To recap

- EER = rate at which events occur in the experimental group
- CER = rate at which events occur in the control group

For example, if we look at a trial comparing the use of paracetamol for dysmenorrhoea compared to placebo we may get the following results

	Total number of patients	Experienced significant pain relief
Paracetamol	100	60
Placebo	80	20

Experimental event rate, EER = $60 / 100 = 0.6$

Control event rate, CER = $20 / 80 = 0.25$

Therefore the relative risk = $EER / CER = 0.6 / 0.25 = 2.4$

If the risk ratio is > 1 then the rate of an event (in this case experiencing significant pain relief) is increased compared to controls. It is therefore appropriate to calculate the relative risk increase if necessary (see below).

If the risk ratio is < 1 then the rate of an event is decreased compared to controls. The relative risk reduction should therefore be calculated (see below).

Relative risk reduction (RRR) or **relative risk increase (RRI)** is calculated by dividing the absolute risk change by the control event rate

Question stats

A	<div></div>	11.7%
B	<div></div>	65.9%
C	<div></div>	7.6%
D	<div></div>	10.8%
E	<div></div>	3.9%

65.9% of users answered this question correctly

Session score = 7.1%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Using the above data, $RRI = (EER - CER) / CER = (0.6 - 0.25) / 0.25 = 1.4 = 140\%$

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 29 of 131



Which one of the following statements regarding the standard error of the mean is correct?

- A. Is the square root of standard deviation
- B. It is independent of sample size
- C. Is a measure of correlation between two variables
- D. Confidence intervals cannot be applied to the standard error of the mean
- E. Gets smaller as the sample size increases



Question stats

A		15.1%
B		4.4%
C		4.4%
D		3.7%
E		72.3%

72.3% of users answered this question correctly

Session score = 6.9%

Standard error of the mean

The standard error of the mean (SEM) is a measure of the spread expected for the mean of the observations - i.e. how 'accurate' the calculated sample mean is from the true population mean

Key point

- $SEM = SD / \text{square root } (n)$
- where SD = standard deviation and n = sample size

Therefore the SEM gets smaller as the sample size (n) increases

A confidence interval for the mean can be calculated in a similar way to that for a single observation, i.e. The 95% confidence interval:

- lower limit = mean - (1.96 * SEM)
- upper limit = mean + (1.96 * SEM)

Rate question:

RCGP curriculum

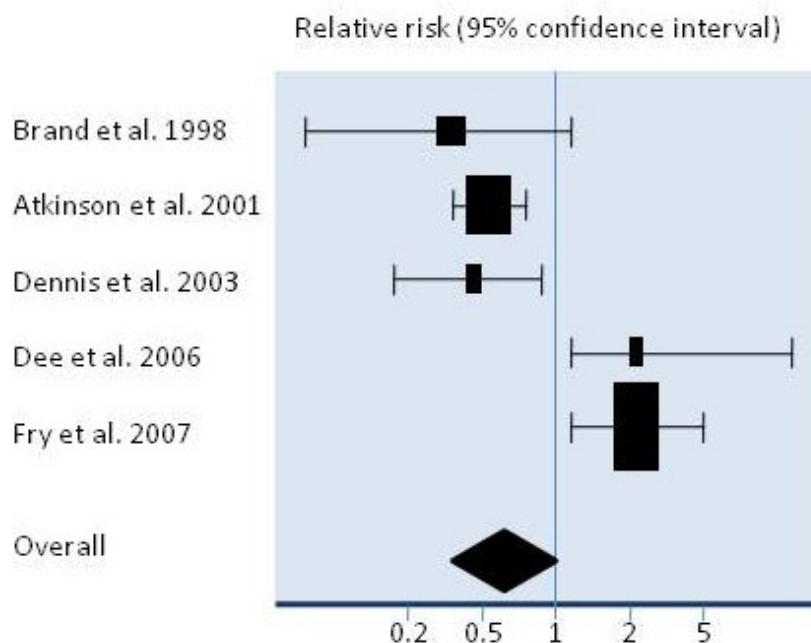
3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 30 of 131



A meta-analysis looks at five studies which investigate the link between a new drug and upper gastrointestinal bleeding. All the studies report the relative risk of developing an upper gastrointestinal bleed compared to a control population.



Question stats

A	5.4%
B	3%
C	65.1%
D	13.8%
E	12.8%

65.1% of users answered this question correctly

Session score = 6.7%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Which one of the studies provides the strongest evidence that the new drug does not cause gastrointestinal bleeding?

- A. Dennis et al
- B. Dee et al
- C. Atkinson et al
- D. Fry et al
- E. Brand et al



The study by Atkinson et al is significant as it does not cross the line equating to a relative risk of 1. The large square and narrow confidence interval indicates a large, well powered study.

Forest plots

Forest plots are usually found in meta-analyses and provide a graphical representation of the strength of evidence of the constituent trials.

The name of the trials is listed down the left hand side, usually in chronological order. On the right hand side the results of the studies are shown as squares

centred on the point estimate of the result of each trial. The size of the square is proportional to the weight of the study in the meta-analysis. The line running through the square shows the confidence interval, usually at 95%. Beneath the individual trials is the summary result (i.e. The result of the meta-analysis) represented by a diamond.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 31 of 131



A new drug is trialled for the treatment of lung cancer. Drug A is given to 500 people with early stage non-small cell lung cancer and a placebo is given to 450 people with the same condition. After 5 years 300 people who received drug A had survived compared to 225 who received the placebo. What is the number needed to treat to save one life?

- A. 3.33
- B. 75
- C. 10
- D. 5
- E. 2



Question stats

A	7.4%
B	10.9%
C	65.8%
D	8.5%
E	7.3%

65.8% of users answered this question correctly

Session score = 6.5%

$$\text{NNT} = 1 / (\text{CER} - \text{EER}), \text{ or } 1 / \text{Absolute Risk Reduction}$$

The question asks about the number needed to treat to save one life. The 'event' is therefore survival.

Experimental (drug A) event rate = $300 / 500 = 0.6$

Control (placebo) event rate = $225 / 450 = 0.5$

Absolute risk reduction = $0.6 - 0.5 = 0.1$

Number needed to treat = $1 / 0.1 = 10$

Numbers needed to treat and absolute risk reduction

Numbers needed to treat (NNT) is a measure that indicates how many patients would require an intervention to reduce the expected number of outcomes by one

It is calculated by $1/(\text{Absolute risk reduction})$ and is rounded to the next highest whole number

Experimental event rate (EER) = (Number who had particular outcome with the intervention) / (Total number who had the intervention)

Control event rate (CER) = (Number who had particular outcome with the control/ (Total number who had the control)

Absolute risk reduction = CER-EER or EER-CER?

The absolute risk reduction (ARR) may be calculated by finding the absolute difference between the control event rate (CER) and the experimental event rate (EER). You will often either version of the above listed in different sources. In some ways it doesn't matter which you use as you will end up with the same answer but from a technical point of view:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

- if the outcome of the study is undesirable then $ARR = CER - EER$
- if the outcome of the study is desirable then $ARR^* = EER - CER$

*this may more accurately be termed absolute benefit increase, rather than absolute risk reduction

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 32 of 131



Which one of the following is the best definition of the p value?



- A. The probability of obtaining a similar result, assuming that the null hypothesis is true
- B. The probability that a replicating experiment would not yield the same conclusion
- C. The probability of obtaining a result at least as extreme, assuming that the null hypothesis is true
- D. The probability that the null hypothesis is true
- E. The probability of obtaining a result at least as extreme, assuming that the null hypothesis is false

Question stats

A		17%
B		3.3%
C		42.1%
D		21.1%
E		16.5%

42.1% of users answered this question correctly

Session score = 6.3%

Significance tests

A null hypothesis (H_0) states that two treatments are equally effective (and is hence negatively phrased). A significance test uses the sample data to assess how likely the null hypothesis is to be correct.

For example:

- 'there is no difference in the prevalence of colorectal cancer in patients taking low-dose aspirin compared to those who are not'

The alternative hypothesis (H_1) is the opposite of the null hypothesis, i.e. There is a difference between the two treatments

The **p value** is the probability of obtaining a result by chance at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. It is therefore equal to the chance of making a type I error (see below).

Two types of errors may occur when testing the null hypothesis

- type I: the null hypothesis is rejected when it is true - i.e. Showing a difference between two groups when it doesn't exist, a false positive. This is determined against a preset significance level (termed alpha). As the significance level is determined in advance the chance of making a type I error is not affected by sample size. It is however increased if the number of end-points are increased. For example if a study has 20 end-points it is likely one of these will be reached, just by chance.
- type II: the null hypothesis is accepted when it is false - i.e. Failing to spot a difference when one really exists, a false negative. The probability of making a type II error is termed beta. It is determined by both sample size and alpha

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

	Study accepts H_0	Study rejects H_0
Reality H_0		Type 1 error (alpha)
Reality H_1	Type 2 error (beta)	Power (1 - beta)

The power of a study is the probability of (correctly) rejecting the null hypothesis when it is false


- power = 1 - the probability of a type II error
- power can be increased by increasing the sample size

Rate question:






All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 33 of 131


A randomised controlled trial compares two drugs used in the initial management of rheumatoid arthritis. After being assigned to the randomised groups a number of patients drop out due to adverse effects of the medication. How should the data be analysed?

- A. Recruit more patients
- B. For each patient who drops out, remove a patient from the other randomised group
-  C. **Include the patients who drop out in the final data set**
- D. Remove patients who drop out from final data set
- E. Abandon the trial if more than 5% of patients drop out

Question stats

A		0.6%
B		2.4%
C		76.2%
D		12.2%
E		8.6%

76.2% of users answered this question correctly

Session score = 6.1%

Intention to treat analysis

Intention to treat analysis is a method of analysis for randomized controlled trials in which all patients randomly assigned to one of the treatments are analysed together, regardless of whether or not they completed or received that treatment

Intention to treat analysis is done to avoid the effects of crossover and drop-out, which may affect the randomization to the treatment groups

Rate question:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Questions 34 to 36 of 131



Theme: Seminal trials: lipid management

- A WOSCOPS
- B UKPDS
- C Heart Protection Study
- D Million Women Study
- E SCOPE
- F CARE
- G The 4S trial
- H STOP-2

Question stats

Average score for registered users:

34	<div></div>	48%
35	<div></div>	41.4%
36	<div></div>	40.6%

Session score = 8.3%

For each one of the following please select the relevant trial:

34. Demonstrated that antioxidants were of no benefit in preventing cardiovascular disease



WOSCOPS

The correct answer is Heart Protection Study

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

35. Demonstrated a 30% reduction in all cause mortality in patients who had a history of ischaemic heart disease who were given simvastatin



WOSCOPS

The correct answer is The 4S trial

36. Showed that pravastatin was beneficial in the primary prevention of ischaemic heart disease



WOSCOPS

Key trials: lipid management

The following table summarises some of the key trials which have altered the approach to lipid management:

The 4S trial	<p>The 1994 Scandinavian Simvastatin Survival Study was a double-blinded randomised controlled trial looking at the secondary prevention of cardiovascular disease.</p> <p>Patients who had ischaemic heart disease and a cholesterol between 5.5 and 8.0 mmol/l were given either simvastatin or a placebo.</p> <p>Main results</p> <ul style="list-style-type: none"> total mortality decreased by 30% with death related to ischaemic heart disease decreased by 42% no increase in non-cardiovascular death
WOSCOPS	<p>The 1995 West of Scotland Coronary Prevention Study was a randomised controlled trial of men aged 45-64 years with no history of ischaemic heart disease and with a raised cholesterol (> 6.5 mmol/l). Participants were given either pravastatin or a placebo.</p> <p>Main results</p> <ul style="list-style-type: none"> total mortality decreased by 22% with death related to ischaemic heart disease decreased by 31%
Heart Protection Study	<p>A large randomised controlled trial of just over 20,000 patients funded by the Medical Research Council. Initial results were published in 2002. Patients were included if they were between 40 - 80 years and were considered to have a substantial 5-year risk of death from ischaemic heart disease due to a history of vascular disease or risk factors such as diabetes or hypertension.</p> <p>Patients were randomly allocated either simvastatin 40mg, antioxidants (600 mg vitamin E, 250 mg vitamin C and 20 mg beta-carotene daily), placebo or a combination.</p> <p>Main results</p> <ul style="list-style-type: none"> number needed to treat (NNT) to prevent all cause death = 57, NNT to prevent death related to ischaemic heart disease = 85 NNT to prevent a vascular event = 19, NNT to prevent a major coronary event = 33, NNT to prevent a stroke = 73 vascular events were reduced by around 25% antioxidants did not affect clinical outcome

Rate question:

Question 37 of 131



A study looks at the chance of having a myocardial infarction (MI) in patients with known ischaemic heart disease. Group A are given standard treatment. After 5 years 20 of the 100 patients have had a MI. Group B have standard treatment plus a new cardiac drug. After 5 years 10 of the 60 patients have had an MI. What is the odds ratio of having a MI whilst taking the new drug compared to those who do not?



- A. 0.8
- B. 0.83
- C. 2
- D. 1.2
- E. 1.25

Question stats

A	<div style="width: 39.6%;"></div>	39.6%
B	<div style="width: 18.4%;"></div>	18.4%
C	<div style="width: 6.3%;"></div>	6.3%
D	<div style="width: 16%;"></div>	16%
E	<div style="width: 19.7%;"></div>	19.7%

39.6% of users answered this question correctly

Session score = 8.1%

Odds - remember a ratio of the number of people who incur a particular outcome to the number of people who do not incur the outcome

NOT a ratio of the number of people who incur a particular outcome to the total number of people

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Odds of MI in group B = $10/50 = 1/5$

Odds of MI in group A = $20/80 = 1/4$

Odds ratio of having a MI = $1/5$ divided by $1/4 = 0.8$

Odds and odds ratio

Odds are a ratio of the number of people who incur a particular outcome to the number of people who do not incur the outcome. The odds ratio may be defined as the ratio of the odds of a particular outcome with experimental treatment and that of control.

Odds ratios are the usual reported measure in case-control studies. It approximates to relative risk if the outcome of interest is rare.

For example, if we look at a trial comparing the use of paracetamol for dysmenorrhoea compared to placebo we may get the following results

	Total number of patients	Achieved = 50% pain relief
Paracetamol	60	40
Placebo	90	30

The odds of achieving significant pain relief with paracetamol = $40 / 20 = 2$

The odds of achieving significant pain relief with placebo = $30 / 60 = 0.5$

Therefore the odds ratio = $2 / 0.5 = 4$

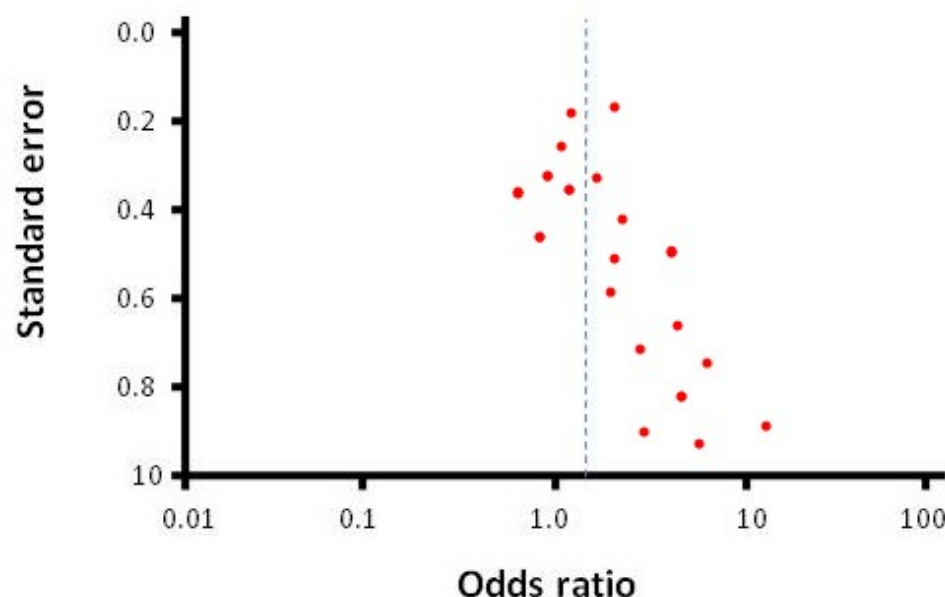
Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 38 of 131



A meta-analysis looks at the benefit of prokinetic agents in patients with gastro-oesophageal reflux disease (GORD). The data from the 19 trials is represented in the diagram below:



Question stats

A	5%
B	14%
C	2.1%
D	28%
E	51%

51% of users answered this question correctly

Session score = 7.9%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

What conclusions can be drawn from this diagram?

- None of the studies were statistically significant
- There is a positive correlation between study size and the clinical benefit from prokinetics
- The results of the smaller trials were falsified
- Six of the studies showed no benefit from prokinetics in GORD
- There is publication bias in some studies looking at the use of prokinetics in GORD



The asymmetrical nature of this funnel plot indicates publication bias.

Funnel plot

A funnel plot is primarily used to demonstrate the existence of publication bias in meta-analyses. Funnel plots are usually drawn with treatment effects on the horizontal axis and study size on the vertical axis.

Interpretation

- a symmetrical, inverted funnel shape indicates that publication bias is unlikely

- conversely, an asymmetrical funnel indicates a relationship between treatment effect and study size. This indicates either publication bias or a systematic difference between smaller and larger studies ('small study effects')

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 39 of 131



An endocrinologist performs a study to assess whether a patient's HbA1c level is correlated to their LDL level. Assuming both HbA1c and LDL are normally distributed, which one of the following statistical tests is it most appropriate to perform?



- A. Chi-squared test
- B. **Pearson's product-moment coefficient**
- C. Mann-Whitney test
- D. Spearman's rank correlation coefficient
- E. McNemar's test

Correlation

- parametric (normally distributed): Pearson's coefficient
- non-parametric: Spearman's coefficient

Pearson's product-moment coefficient test is most appropriate as the data is parametric and the study is assessing the correlation of two variables

McNemar's test is a non-parametric method used on nominal data to determine whether the row and column marginal frequencies are equal

Significance tests: types

The type of significance test used depends on whether the data is parametric (something which can be measured, usually normally distributed) or non-parametric

Parametric tests

- Student's t-test - paired or unpaired
- Pearson's product-moment coefficient - correlation

Non-parametric tests

- Mann-Whitney - unpaired data
- Wilcoxon matched-pairs - compares two sets of observations on a single sample
- chi-squared test - used to compare proportions or percentages
- Spearman, Kendall rank - correlation

Paired data refers to data obtained from a single group of patients, e.g. Measurement before and after an intervention. Unpaired data comes from two

Question stats

A		28.7%
B		43.6%
C		11.7%
D		15.3%
E		0.8%

43.6% of users answered this question correctly

Session score = 7.7%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

different groups of patients, e.g. Comparing response to different interventions in two groups

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 40 of 131



A study is to be performed to assess whether the combined oral contraceptive pill is protective against pelvic inflammatory disease. What is the most appropriate type of study design to provide robust evidence?



- A. Cohort study
- B. Placebo-controlled randomised controlled trial
- C. Case-control study
- D. Cross-sectional survey
- E. Cross-over trial

Whilst a case-control study may be used it would provide inferior evidence to that of a cohort study. It is of course not ethical to give women placebo contraceptive pills, as would be required with a randomised control trial

Study design

The following table highlights the main features of the main types of study:

Randomised controlled trial	<p>Participants randomly allocated to intervention or control group (e.g. standard treatment or placebo)</p> <ul style="list-style-type: none"> Practical or ethical problems may limit use
Cohort study	<p>Observational and prospective. Two (or more) are selected according to their exposure to a particular agent (e.g. medicine, toxin) and followed up to see how many develop a disease or other outcome.</p> <p>The usual outcome measure is the relative risk.</p> <ul style="list-style-type: none"> Examples include Framingham Heart Study
Case-control study	<p>Observational and retrospective. Patients with a particular condition (cases) are identified and matched with controls. Data is then collected on past exposure to a possible causal agent for the condition.</p> <p>The usual outcome measure is the odds ratio.</p> <ul style="list-style-type: none"> Inexpensive, produce quick results Useful for studying rare conditions Prone to confounding
Cross-sectional survey	<p>Provide a 'snapshot', sometimes called prevalence studies</p> <ul style="list-style-type: none"> Provide weak evidence of cause and effect

Rate question:

Question stats

A	<div></div>	41.9%
B	<div></div>	30.9%
C	<div></div>	23.8%
D	<div></div>	2.6%
E	<div></div>	0.8%

41.9% of users answered this question correctly

Session score = 7.5%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 41 of 131



Which one of the following statements regarding the power of a study is correct?



- A. Is the probability of rejecting the null hypothesis when it is false
- B. Decreases with increasing sample size
- C. Lies within 2 standard deviations of the mean
- D. Is the chance a significant p value will be reached
- E. Is equal to 1 - (the probability of a type I error)

Power = 1 - the probability of a type II error

Question stats

A	<div style="width: 45.4%;"></div>	45.4%
B	<div style="width: 8.1%;"></div>	8.1%
C	<div style="width: 4.6%;"></div>	4.6%
D	<div style="width: 21.5%;"></div>	21.5%
E	<div style="width: 20.4%;"></div>	20.4%

45.4% of users answered this question correctly

Session score = 7.3%

Significance tests

A null hypothesis (H_0) states that two treatments are equally effective (and is hence negatively phrased). A significance test uses the sample data to assess how likely the null hypothesis is to be correct.

For example:

- 'there is no difference in the prevalence of colorectal cancer in patients taking low-dose aspirin compared to those who are not'

The alternative hypothesis (H_1) is the opposite of the null hypothesis, i.e. There is a difference between the two treatments

The **p value** is the probability of obtaining a result by chance at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. It is therefore equal to the chance of making a type I error (see below).

Two types of errors may occur when testing the null hypothesis

- type I: the null hypothesis is rejected when it is true - i.e. Showing a difference between two groups when it doesn't exist, a false positive. This is determined against a preset significance level (termed alpha). As the significance level is determined in advance the chance of making a type I error is not affected by sample size. It is however increased if the number of end-points are increased. For example if a study has 20 end-points it is likely one of these will be reached, just by chance.
- type II: the null hypothesis is accepted when it is false - i.e. Failing to spot a difference when one really exists, a false negative. The probability of making a type II error is termed beta. It is determined by both sample size and alpha

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

	Study accepts H_0	Study rejects H_0
Reality H_0		Type 1 error (alpha)
Reality H_1	Type 2 error (beta)	Power (1 - beta)

The power of a study is the probability of (correctly) rejecting the null hypothesis when it is false

- power = 1 - the probability of a type II error
- power can be increased by increasing the sample size

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 42 of 131



Which one of the following statements regarding the normal distribution is correct?

- A. Is a discrete probability distribution
- B. 99.7% of values lie within 2 standard deviations of the mean
- C. **Mean = mode = median**
- D. Standard deviation = mean / square root (variance)
- E. Is also referred to as the binomial distribution



Question stats

A	3.7%
B	9.1%
C	64.7%
D	11.6%
E	10.9%

64.7% of users answered this question correctly

Session score = 7.1%

The Normal distribution is a continuous probability distribution

Normal distribution

The normal distribution is also normal as Gaussian distribution or 'bell-shaped' distribution. It describes the spread of many biological and clinical measurements

Properties of the Normal distribution

- symmetrical i.e. mean = mode = median
- 68.3% of values lie within 1 SD of the mean
- 95.4% of values lie within 2 SD of the mean
- 99.7% of values lie within 3 SD of the mean
- this is often reversed, so that within 1.96 SD of the mean lie 95% of the sample values
- the range of the mean - (1.96 * SD) to the mean + (1.96 * SD) is called the 95% confidence interval, i.e. if a repeat sample of 100 observations are taken from the same group 95 of them would be expected to lie in that range

Standard deviation

- the standard deviation (SD) represents the average difference each observation in a sample lies from the sample mean
- SD = square root (variance)

Rate question:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Questions 43 to 45 of 131



Theme: Screening test statistics

- A Specificity
- B Relative risk
- C Absolute risk reduction
- D Sensitivity
- E Negative predictive value
- F Odds ratio
- G Likelihood ratio for a positive test result
- H Positive predictive value
- I Likelihood ratio for a negative test result
- J Relative risk reduction

Please select the statistical term that each phrase describes:

43. How much the odds of the disease increase when a test is positive



Specificity

The correct answer is Likelihood ratio for a positive test result

44. Proportion of patients without the condition who have a negative test result



Specificity

45. The chance that the patient has the condition if the diagnostic test is positive



Specificity

The correct answer is Positive predictive value

Question stats

Average score for registered users:

43	<div></div>	61.6%
44	<div></div>	68.1%
45	<div></div>	53.7%

Session score = 8.9%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a

contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	$TP / (TP + FN)$	Proportion of patients with the condition who have a positive test result
Specificity	$TN / (TN + FP)$	Proportion of patients without the condition who have a negative test result
Positive predictive value	$TP / (TP + FP)$	The chance that the patient has the condition if the diagnostic test is positive
Negative predictive value	$TN / (TN + FN)$	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	$\text{sensitivity} / (1 - \text{specificity})$	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	$(1 - \text{sensitivity}) / \text{specificity}$	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

Question 46 of 131



A new blood test to screen patients for heart failure is trialled on 500 patients. The test was positive in 40 of the 50 patients shown to have heart failure by echocardiography. It was also positive in 20 patients who were shown not to have heart failure. What is the positive predictive value of the test?



- A. 0.8
- B. 0.66
- C. 0.33
- D. 0.1
- E. Cannot be calculated

Question stats

A	<div></div>	20.3%
B	<div></div>	65%
C	<div></div>	5.3%
D	<div></div>	2.1%
E	<div></div>	7.3%

65% of users answered this question correctly

Session score = 8.7%

A contingency table can be constructed from the above data, as shown below:

	Heart failure	No heart failure
Test positive	40	20
Test negative	10	430

Positive predictive value = $TP / (TP + FP) = 40 / (40 + 20) = 0.66$

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	$TP / (TP + FN)$	Proportion of patients with the condition who have a positive test result
Specificity	$TN / (TN + FP)$	Proportion of patients without the condition who have a negative test result
Positive predictive value	$TP / (TP + FP)$	The chance that the patient has the condition if the diagnostic test is positive

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Negative predictive value	$TN / (TN + FN)$	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	$\text{sensitivity} / (1 - \text{specificity})$	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	$(1 - \text{sensitivity}) / \text{specificity}$	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 47 of 131



A study is performed looking at the validity of a new diagnostic test for heart failure. The study designers are concerned that not all patients may receive the gold-standard existing test. What type of bias does this describe?

- A. Attention bias
- B. Selection bias
- C. **Work-up bias**
- D. Co-intervention bias
- E. Instrument bias



Question stats

A	8.7%
B	35.1%
C	32.8%
D	15.3%
E	8.2%

32.8% of users answered this question correctly

Session score = 8.5%

Bias

Bias describes the situation in a trial where one outcome is systematically favoured. A number of different types of bias are recognised:

Selection bias	Error in assigning individuals to groups leading to differences which may influence outcome. Subtypes include sampling bias where the subjects are not representative of the population. This may be due to volunteer bias . An example of volunteer bias would be a study looking at the prevalence of <i>Chlamydia</i> in the student population. Students who are at risk of <i>Chlamydia</i> may be more, or less, likely to participate in the study. A similar concept is non-responder bias . If a survey on dietary habits was sent out in the post to random households it is likely that the people who didn't respond would have poorer diets than those who did.
Publication bias	Failure to publish results from valid studies, often as they showed a negative or uninteresting result. Important in meta-analyses where studies showing negative results may be excluded.
Work-up bias (verification bias)	Mainly seen in studies trying to validate a new diagnostic test. Refers to the gold-standard diagnostic test being done more frequently in patients who have already had a positive new test.
Expectation bias	Only a problem in non-blinded trials. Observers may subconsciously measure or report data in a way that favours the expected study outcome.
Recall bias	A particular problem in case-control studies.

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Rate question:

Question 48 of 131



A new antihypertensive is in phase III development. A study is designed where a margin is defined ($-\delta$ to $+\delta$) on mean blood pressure reduction. If the confidence interval of the difference between the new drug and ramipril lies within this margin then the trial can be said to have produced a positive result. What is this an example of?

- A. Non-inferiority trial
- B. Superiority trial
- C. Placebo-controlled trial
- D. Delta-controlled trial
- E. **Equivalence trial**



Question stats

A		16.2%
B		20.9%
C		2.3%
D		7.6%
E		53.1%

53.1% of users answered this question correctly

Session score = 8.3%

Study design: new drugs

When a new drug is launched there are a number of options available in terms of study design. One option is a placebo controlled trial. Whilst this may provide robust evidence it may be considered unethical if established treatments are available and it also does not provide a comparison with standard treatments.

If a drug is therefore to be compared to an existing treatment a statistician will need to decide whether the trial is intended to show superiority, equivalence or non-inferiority:

- superiority: whilst this may seem the natural aim of a trial one problem is the large sample size needed to show a significant benefit over an existing treatment
- equivalence: an equivalence margin is defined ($-\delta$ to $+\delta$) on a specified outcome. If the confidence interval of the difference between the two drugs lies within the equivalence margin then the drugs may be assumed to have a similar effect
- non-inferiority: similar to equivalence trials, but only the lower confidence interval needs to lie within the equivalence margin (i.e. $-\delta$). Small sample sizes are needed for these trials. Once a drug has been shown to be non-inferior large studies may be performed to show superiority

It should be remembered that drug companies may not necessarily want to show superiority over an existing product. If it can be demonstrated that their product is equivalent or even non-inferior then they may compete on price or convenience.

Rate question:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

External links

[European Medicines Agency](#)

Further information on trial design

Question 49 of 131



A study is performed looking at the chance of stroke in high-risk patients taking a new oral antithrombotic drug compared to warfarin. The following results are obtained:

	Total number of patients	Number who had a stroke within a 3 year period
New drug	200	10
Warfarin	600	12

What is the relative risk of having a stroke within a 3 year period for patients taking the new drug compared to warfarin?

- A. 3.33
- B. 0.66
- C. 1.2
- D. 2.5
- E. Cannot calculate from above data



$$\text{Relative risk} = \text{EER} / \text{CER}$$

Experimental event rate, EER = $10 / 200 = 0.05$

Control event rate, CER = $12 / 600 = 0.02$

Therefore the relative risk = $\text{EER} / \text{CER} = 0.05 / 0.02 = 2.5$

Relative risk

Relative risk (RR) is the ratio of risk in the experimental group (experimental event rate, EER) to risk in the control group (control event rate, CER)

To recap

- EER = rate at which events occur in the experimental group
- CER = rate at which events occur in the control group

For example, if we look at a trial comparing the use of paracetamol for dysmenorrhoea compared to placebo we may get the following results

	Total number of patients	Experienced significant pain relief

Question stats

A	7.1%
B	9.5%
C	7.3%
D	71.6%
E	4.4%

71.6% of users answered this question correctly

Session score = 8.2%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Paracetamol	100	60
Placebo	80	20

Experimental event rate, $EER = 60 / 100 = 0.6$

Control event rate, $CER = 20 / 80 = 0.25$

Therefore the relative risk = $EER / CER = 0.6 / 0.25 = 2.4$

If the risk ratio is > 1 then the rate of an event (in this case experiencing significant pain relief) is increased compared to controls. It is therefore appropriate to calculate the relative risk increase if necessary (see below).

If the risk ratio is < 1 then the rate of an event is decreased compared to controls. The relative risk reduction should therefore be calculated (see below).

Relative risk reduction (RRR) or **relative risk increase (RRI)** is calculated by dividing the absolute risk change by the control event rate

Using the above data, $RRI = (EER - CER) / CER = (0.6 - 0.25) / 0.25 = 1.4 = 140\%$

Rate question:

Question 50 of 131



A rapid urine screening test is developed to detect *Chlamydia*. A trial involving 200 men and women is performed comparing the new test to the existing NAAT techniques:

	<i>Chlamydia</i> present	<i>Chlamydia</i> absent
New test positive	20	3
New test negative	5	172

What is the negative predictive value of the new test?



- A. 172/177
- B. 20/23
- C. 172/192
- D. 172/175
- E. 20/25

Negative predictive value = $TN / (TN + FN)$

$$= 172 / (172 + 5)$$

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	$TP / (TP + FN)$	Proportion of patients with the condition who have a positive test result
Specificity	$TN / (TN + FP)$	Proportion of patients without the condition who have a negative test result
Positive predictive value	$TP / (TP + FP)$	The chance that the patient has the condition if the diagnostic test is positive

Question stats

A		73.9%
B		1.7%
C		2.4%
D		20.7%
E		1.2%

73.9% of users answered this question correctly

Session score = 8%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Negative predictive value	$TN / (TN + FN)$	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	$\text{sensitivity} / (1 - \text{specificity})$	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	$(1 - \text{sensitivity}) / \text{specificity}$	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 51 of 131


A study measures a patients serum cholesterol before and after a new lipid-lowering therapy has been given. What type of significance test should be used to analyse the data?



- A. **Student's paired t-test**
- B. Student's unpaired t-test
- C. Chi-squared test
- D. Pearson's test
- E. Spearman test

Question stats

A	<div style="width: 65%;"></div>	65%
B	<div style="width: 6.5%;"></div>	6.5%
C	<div style="width: 14.2%;"></div>	14.2%
D	<div style="width: 10%;"></div>	10%
E	<div style="width: 4.3%;"></div>	4.3%

65% of users answered this question correctly

Session score = 7.8%

Significance tests: types

The type of significance test used depends on whether the data is parametric (something which can be measured, usually normally distributed) or non-parametric

Parametric tests

- Student's t-test - paired or unpaired
- Pearson's product-moment coefficient - correlation

Non-parametric tests

- Mann-Whitney - unpaired data
- Wilcoxon matched-pairs - compares two sets of observations on a single sample
- chi-squared test - used to compare proportions or percentages
- Spearman, Kendall rank - correlation

Paired data refers to data obtained from a single group of patients, e.g. Measurement before and after an intervention. Unpaired data comes from two different groups of patients, e.g. Comparing response to different interventions in two groups

Rate question:
RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Questions 52 to 54 of 131



Theme: Key trials: diabetes mellitus

- A HOPE
- B Heart Protection Study
- C DREAM
- D DCCT
- E Stop-NIDDM
- F XENDOS
- G IDPP
- H UKPDS

Question stats

Average score for registered users:

52	<div style="width: 23.3%;"></div>	23.3%
53	<div style="width: 34.5%;"></div>	34.5%
54	<div style="width: 41.2%;"></div>	41.2%

Session score = 7.4%

For each one of the following please select the relevant trial:

52. Showed the benefit of tight glycaemic control in type 1 diabetics



HOPE

The correct answer is DCCT

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

53. Suggests that the onset of diabetes in patients with impaired fasting glucose (IFG) and/or impaired glucose tolerance (IGT) could be delayed by rosiglitazone



HOPE

The correct answer is DREAM

Rosiglitazone was withdrawn in 2010 following concerns about the cardiovascular side-effect profile.

54. Showed the benefit of tight glycaemic control in type 2 diabetics



HOPE

The correct answer is UKPDS

Key trials: diabetes mellitus

The following table summarises some of the key trials that have altered the approach to diabetes mellitus:

UKPDS	<p>The United Kingdom Prospective Diabetes Study was a seminal trial of over 5,000 patients with type 2 diabetes mellitus. Patients were followed for an average of 10 years to establish whether control of blood glucose levels was associated with clinical benefits (reduced macrovascular and microvascular complications) and whether there was an advantage to any particular type of drug treatment. UKPDS also had a blood pressure control arm to establish whether this had an impact on complication rates.</p> <p>Main results</p> <ul style="list-style-type: none"> • UKPDS confirmed the importance of tight glycaemic and blood pressure control in type 2 diabetics • both macrovascular and microvascular complications were reduced in patients with tight glycaemic control
DCCT	<p>The Diabetes Control and Complications Trial involved 1,400 patients with type 1 diabetes mellitus in the US and Canada between 1983 and 1993.</p> <p>Main results</p> <ul style="list-style-type: none"> • DCCT showed a significant reduction in microvascular complications for patients who had tight glycaemic control • there was a higher incidence of hypoglycaemia in the group who had tight glycaemic control
DREAM	<p>The Diabetes Reduction Assessment with ramipril and rosiglitazone Medication trial looked at whether patients with impaired fasting glucose (IFG) and/or impaired glucose tolerance (IGT) could be stopped from developing type 2 diabetes by using either ramipril and rosiglitazone.</p> <p>The study showed that the onset of type 2 diabetes may be delayed by rosiglitazone therapy.</p>

Rate question:

Question 55 of 131



A study looks at the benefits of adding a new antiplatelet drug to aspirin following a myocardial infarction. The following results are obtained:

	Percentage of patients having further MI within 3 months
Aspirin	4%
Aspirin + new drug	3%

What is the number needed to treat to prevent one patient having a further myocardial infarction within 3 months?

- A. 0.75
- B. 0.33
- C. Cannot calculate without more data
- D. 1
- E. 100



$$\text{NNT} = 1 / (\text{CER} - \text{EER}), \text{ or } 1 / \text{Absolute Risk Reduction}$$

$$\text{NNT} = 1 / (\text{control event rate} - \text{experimental event rate})$$

$$= 1 / (0.04 - 0.03) = 1 / (0.01) = 100$$

Numbers needed to treat and absolute risk reduction

Numbers needed to treat (NNT) is a measure that indicates how many patients would require an intervention to reduce the expected number of outcomes by one

It is calculated by $1/(\text{Absolute risk reduction})$ and is rounded to the next highest whole number

Experimental event rate (EER) = (Number who had particular outcome with the intervention) / (Total number who had the intervention)

Control event rate (CER) = (Number who had particular outcome with the control/ (Total number who had the control)

Absolute risk reduction = CER-EER or EER-CER?

The absolute risk reduction (ARR) may be calculated by finding the absolute difference between the control event rate (CER) and the experimental event rate (EER). You will often either version of the above listed in different sources. In

Question stats

A	4.5%
B	3.1%
C	15%
D	18.7%
E	58.6%

58.6% of users answered this question correctly

Session score = 7.3%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

some ways in doesn't matter which you use as you will end up with the same answer but from a technical point of view:

- if the outcome of the study is undesirable then $ARR = CER - EER$
- if the outcome of the study is desirable then $ARR^* = EER - CER$

*this may more accurately be termed absolute benefit increase, rather than absolute risk reduction

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 56 of 131



The Framingham Heart Study is an example of a:



- A. Cross-sectional survey
- B. Cohort study
- C. Case-control study
- D. Randomised controlled trial
- E. Meta-analysis

Question stats

A	6.2%
B	69%
C	7.7%
D	8.7%
E	8.4%

69% of users answered this question correctly

Session score = 7.1%

Study design

The following table highlights the main features of the main types of study:

Randomised controlled trial	<p>Participants randomly allocated to intervention or control group (e.g. standard treatment or placebo)</p> <ul style="list-style-type: none"> Practical or ethical problems may limit use
Cohort study	<p>Observational and prospective. Two (or more) are selected according to their exposure to a particular agent (e.g. medicine, toxin) and followed up to see how many develop a disease or other outcome.</p> <p>The usual outcome measure is the relative risk.</p> <ul style="list-style-type: none"> Examples include Framingham Heart Study
Case-control study	<p>Observational and retrospective. Patients with a particular condition (cases) are identified and matched with controls. Data is then collected on past exposure to a possible causal agent for the condition.</p> <p>The usual outcome measure is the odds ratio.</p> <ul style="list-style-type: none"> Inexpensive, produce quick results Useful for studying rare conditions Prone to confounding
Cross-sectional survey	<p>Provide a 'snapshot', sometimes called prevalence studies</p> <ul style="list-style-type: none"> Provide weak evidence of cause and effect

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Rate question:

Question 57 of 131



Which one of the following statements best describes a type I statistical error?



- A. The null hypothesis is rejected when it is true
- B. The null hypothesis is accepted when it is false
- C. The p value fails to reach statistical significance
- D. The alternative hypothesis is rejected when it is true
- E. A study fails to reach an appropriate power

Question stats

A	<div style="width: 75.2%;"></div>	75.2%
B	<div style="width: 19.1%;"></div>	19.1%
C	<div style="width: 2.5%;"></div>	2.5%
D	<div style="width: 1.6%;"></div>	1.6%
E	<div style="width: 1.6%;"></div>	1.6%

75.2% of users answered this question correctly

Session score = 7%

Significance tests

A null hypothesis (H_0) states that two treatments are equally effective (and is hence negatively phrased). A significance test uses the sample data to assess how likely the null hypothesis is to be correct.

For example:

- 'there is no difference in the prevalence of colorectal cancer in patients taking low-dose aspirin compared to those who are not'

The alternative hypothesis (H_1) is the opposite of the null hypothesis, i.e. There is a difference between the two treatments

The **p value** is the probability of obtaining a result by chance at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. It is therefore equal to the chance of making a type I error (see below).

Two types of errors may occur when testing the null hypothesis

- type I: the null hypothesis is rejected when it is true - i.e. Showing a difference between two groups when it doesn't exist, a false positive. This is determined against a preset significance level (termed alpha). As the significance level is determined in advance the chance of making a type I error is not affected by sample size. It is however increased if the number of end-points are increased. For example if a study has 20 end-points it is likely one of these will be reached, just by chance.
- type II: the null hypothesis is accepted when it is false - i.e. Failing to spot a difference when one really exists, a false negative. The probability of making a type II error is termed beta. It is determined by both sample size and alpha

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

	Study accepts H_0	Study rejects H_0
Reality H_0		Type 1 error (alpha)

Reality H_1	Type 2 error (beta)	Power (1 - beta)
---------------	---------------------	------------------

The power of a study is the probability of (correctly) rejecting the null hypothesis when it is false

- power = 1 - the probability of a type II error
- power can be increased by increasing the sample size

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 58 of 131



What is the correct formula to calculate the positive predictive value?

TP = true positive; FP = false positive; TN = true negative; FN = false negative



- A. Sensitivity / (1 - specificity)
- B. $TP / (TP + FP)$
- C. $TN / (TN + FP)$
- D. $TN / (TN + FN)$
- E. $TP / (TP + FN)$

Question stats

A	<div></div>	4.2%
B	<div></div>	82.7%
C	<div></div>	1.4%
D	<div></div>	1.1%
E	<div></div>	10.6%

82.7% of users answered this question correctly

Session score = 6.9%

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	$TP / (TP + FN)$	Proportion of patients with the condition who have a positive test result
Specificity	$TN / (TN + FP)$	Proportion of patients without the condition who have a negative test result
Positive predictive value	$TP / (TP + FP)$	The chance that the patient has the condition if the diagnostic test is positive
Negative predictive value	$TN / (TN + FN)$	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	$\text{sensitivity} / (1 - \text{specificity})$	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	$(1 - \text{sensitivity}) / \text{specificity}$	How much the odds of the disease decrease when a test is negative

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 59 of 131



The serum potassium is measured in a 1,000 patients taking an ACE inhibitors. The mean potassium is 4.6 mmol/l with a standard deviation of 0.3 mmol/l. Which one of the following statements is correct?

- A. 95% of values lie between 4.5 and 4.75 mmol/l
- B. 95.4% of values lie between 4.3 and 4.9 mmol/l
- C. 99.7% of values lie between 4.0 and 5.2 mmol/l
- D. 68.3% of values lie between 4.5 and 4.75 mmol/l
- E. 68.3% of values lie between 4.3 and 4.9 mmol/l



We know that 68.3% of values of a normally distributed variable lie within 1 standard deviation of the mean. This means the range is 4.3 to 4.9 mmol/l.

Normal distribution

The normal distribution is also normal as Gaussian distribution or 'bell-shaped' distribution. It describes the spread of many biological and clinical measurements

Properties of the Normal distribution

- symmetrical i.e. mean = mode = median
- 68.3% of values lie within 1 SD of the mean
- 95.4% of values lie within 2 SD of the mean
- 99.7% of values lie within 3 SD of the mean
- this is often reversed, so that within 1.96 SD of the mean lie 95% of the sample values
- the range of the mean - (1.96 * SD) to the mean + (1.96 * SD) is called the 95% confidence interval, i.e. if a repeat sample of 100 observations are taken from the same group 95 of them would be expected to lie in that range

Standard deviation

- the standard deviation (SD) represents the average difference each observation in a sample lies from the sample mean
- SD = square root (variance)

Rate question:

Question stats

A	3.8%
B	26.7%
C	10.3%
D	2%
E	57.2%

57.2% of users answered this question correctly

Session score = 6.8%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 60 of 131



A follow-up study is performed looking at the height of 100 adults who were given steroids during childhood. The average height of the adults is 169cm, with a standard deviation of 16cm. What is the standard error of the mean?

- A. Cannot be calculated
- B. 1.69
- C. 0.16
- D. 1.6
- E. 1.3



Standard error of the mean = standard deviation / square root (number of patients)

The standard error of the mean is calculated by the standard deviation / square root (number of patients)

$$= 16 / \text{square root } (100) = 16 / 10 = 1.6$$

Standard error of the mean

The standard error of the mean (SEM) is a measure of the spread expected for the mean of the observations - i.e. how 'accurate' the calculated sample mean is from the true population mean

Key point

- $SEM = SD / \text{square root } (n)$
- where SD = standard deviation and n = sample size

Therefore the SEM gets smaller as the sample size (n) increases

A confidence interval for the mean can be calculated in a similar way to that for a single observation, i.e. The 95% confidence interval:

- lower limit = mean - (1.96 * SEM)
- upper limit = mean + (1.96 * SEM)

Rate question:

Question stats

A	13.7%
B	6.5%
C	15.5%
D	58.5%
E	5.7%

58.5% of users answered this question correctly

Session score = 6.7%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Questions 61 to 63 of 131



Theme: Data types

- A** Binomial
- B** Discrete
- C** Nominal
- D** Continuous
- E** Interval variable
- F** Ordinal

For each of the following please select the closest matching data type:

61. Data may take one of two values



Binomial

62. The NYHA classification of heart failure symptoms



Binomial

The correct answer is Ordinal

63. The height of a patient



Binomial

The correct answer is Continuous

Question stats

Average score for registered users:

61	<div style="width: 85.9%;"></div>	85.9%
62	<div style="width: 30.8%;"></div>	30.8%
63	<div style="width: 57.7%;"></div>	57.7%

Session score = 7.9%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Data types

Data type	Description
Nominal	Observed values can be put into set categories which have no particular order or hierarchy. You can count but not order or measure nominal data (for example birthplace)
Ordinal	Observed values can be put into set categories which themselves can be ordered (for example NYHA classification of heart failure symptoms)
Discrete	Observed values are confined to a certain values, usually a finite number

	of whole numbers (for example the number of asthma exacerbations in a year)
Continuous	Data can take any value with certain range (for example weight)
Binomial	Data may take one of two values (for example gender)
Interval	A measurement where the difference between two values is meaningful, such that equal differences between values correspond to real differences between the quantities that the scale measures (for example temperature)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 64 of 131



A new drug which may reduce the chance of patients with chronic kidney disease developing gout is introduced. In one study of 2,000 patients 1,200 received the new drug of which 120 patients develop gout. The remaining 800 patients received a placebo of which 200 developed gout. What is the absolute risk reduction of developing gout?



- A. 0.1
- B. 15%
- C. 120
- D. 25%
- E. 6.66

Absolute risk reduction = (Control event rate) - (Experimental event rate)

Absolute risk reduction = (Experimental event rate) - (Control event rate)

Control event rate = $200 / 800 = 0.25$

Experimental event rate = $120 / 1,200 = 0.1$

Absolute risk reduction = $0.25 - 0.1 = 0.15 = 15\%$ reduction

Numbers needed to treat and absolute risk reduction

Numbers needed to treat (NNT) is a measure that indicates how many patients would require an intervention to reduce the expected number of outcomes by one

It is calculated by $1/(\text{Absolute risk reduction})$ and is rounded to the next highest whole number

Experimental event rate (EER) = (Number who had particular outcome with the intervention) / (Total number who had the intervention)

Control event rate (CER) = (Number who had particular outcome with the control/ (Total number who had the control)

Absolute risk reduction = CER-EER or EER-CER?

The absolute risk reduction (ARR) may be calculated by finding the absolute difference between the control event rate (CER) and the experimental event rate (EER). You will often either version of the above listed in different sources. In some ways it doesn't matter which you use as you will end up with the same answer but from a technical point of view:

- if the outcome of the study is undesirable then $ARR = CER - EER$
- if the outcome of the study is desirable then $ARR^* = EER - CER$

Question stats

A		6%
B		70.1%
C		1.8%
D		14.5%
E		7.5%

70.1% of users answered this question correctly

Session score = 7.8%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

*this may more accurately be termed absolute benefit increase, rather than absolute risk reduction

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 64 of 131



A new drug which may reduce the chance of patients with chronic kidney disease developing gout is introduced. In one study of 2,000 patients 1,200 received the new drug of which 120 patients develop gout. The remaining 800 patients received a placebo of which 200 developed gout. What is the absolute risk reduction of developing gout?



- A. 0.1
- B. 15%
- C. 120
- D. 25%
- E. 6.66

Absolute risk reduction = (Control event rate) - (Experimental event rate)

Absolute risk reduction = (Experimental event rate) - (Control event rate)

Control event rate = $200 / 800 = 0.25$

Experimental event rate = $120 / 1,200 = 0.1$

Absolute risk reduction = $0.25 - 0.1 = 0.15 = 15\%$ reduction

Numbers needed to treat and absolute risk reduction

Numbers needed to treat (NNT) is a measure that indicates how many patients would require an intervention to reduce the expected number of outcomes by one

It is calculated by $1/(\text{Absolute risk reduction})$ and is rounded to the next highest whole number

Experimental event rate (EER) = (Number who had particular outcome with the intervention) / (Total number who had the intervention)

Control event rate (CER) = (Number who had particular outcome with the control/ (Total number who had the control)

Absolute risk reduction = CER-EER or EER-CER?

The absolute risk reduction (ARR) may be calculated by finding the absolute difference between the control event rate (CER) and the experimental event rate (EER). You will often either version of the above listed in different sources. In some ways it doesn't matter which you use as you will end up with the same answer but from a technical point of view:

- if the outcome of the study is undesirable then $ARR = CER - EER$
- if the outcome of the study is desirable then $ARR^* = EER - CER$

Question stats

A	<div style="width: 6%;"></div>	6%
B	<div style="width: 70.1%;"></div>	70.1%
C	<div style="width: 1.8%;"></div>	1.8%
D	<div style="width: 14.5%;"></div>	14.5%
E	<div style="width: 7.5%;"></div>	7.5%

70.1% of users answered this question correctly

Session score = 7.8%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

*this may more accurately be termed absolute benefit increase, rather than absolute risk reduction


Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 65 of 131



A new test to screen for ovarian cancer in patients with a positive family history is tested on 920 patients. The test is positive in 16 of the 20 patients who are proven to have ovarian cancer. Of the remaining patients, only 10 have a positive test. What is the negative predictive value of the new test?

- A. $900/920 = 97.8\%$
- B. $890/900 = 98.9\%$
- C. $10/900 = 1.1\%$
-  D. $890/894 = 99.6\%$
- E. $890/920 = 96.7\%$

Question stats

A	4.6%
B	18.2%
C	6.4%
D	66.3%
E	4.4%

66.3% of users answered this question correctly

Session score = 7.7%

A contingency table can be constructed from the above data, as shown below:

	Ovarian cancer	No ovarian cancer
Test positive	16	10
Test negative	4	890

The negative predictive value = $TN / (TN + FN) = 890 / (890 + 4) = 890/894$

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	$TP / (TP + FN)$	Proportion of patients with the condition who have a positive test result
Specificity	$TN / (TN + FP)$	Proportion of patients without the condition who have a negative test result
Positive predictive value	$TP / (TP + FP)$	The chance that the patient has the condition if the diagnostic test is positive

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Negative predictive value	$TN / (TN + FN)$	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	$\text{sensitivity} / (1 - \text{specificity})$	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	$(1 - \text{sensitivity}) / \text{specificity}$	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 66 of 131


Which one of the following significance tests is used to analyse data which is measured and follows a normal distribution?

- A. Chi-squared test
- B. Spearman's rank correlation coefficient
- C. Wilcoxon matched-pairs
- D. Mann-Whitney test
- E. **Student's t-test**



Student's t-test is used to analyse parametric data. The other tests are used on non-parametric data

Significance tests: types

The type of significance test used depends on whether the data is parametric (something which can be measured, usually normally distributed) or non-parametric

Parametric tests

- Student's t-test - paired or unpaired
- Pearson's product-moment coefficient - correlation

Non-parametric tests

- Mann-Whitney - unpaired data
- Wilcoxon matched-pairs - compares two sets of observations on a single sample
- chi-squared test - used to compare proportions or percentages
- Spearman, Kendall rank - correlation

Paired data refers to data obtained from a single group of patients, e.g. Measurement before and after an intervention. Unpaired data comes from two different groups of patients, e.g. Comparing response to different interventions in two groups

Rate question:

Question stats

A		16.3%
B		9.3%
C		1.4%
D		6.5%
E		66.6%

66.6% of users answered this question correctly

Session score = 7.6%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 67 of 131



A new blood test is developed to screen for prostate cancer. Trials have shown it has a sensitivity for detecting clinically significant prostate cancer of 80% but a specificity of 60%. What is the likelihood ratio for a positive test result?



- A. Cannot be calculated
- B. 2
- C. 4
- D. 0.8
- E. 0.2

Likelihood ratio for a positive test result = sensitivity / (1 - specificity)

Likelihood ratio for a positive test result = sensitivity / (1 - specificity)

= 0.8 / (1 - 0.6) = 2

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	TP / (TP + FN)	Proportion of patients with the condition who have a positive test result
Specificity	TN / (TN + FP)	Proportion of patients without the condition who have a negative test result
Positive predictive value	TP / (TP + FP)	The chance that the patient has the condition if the diagnostic test is positive
Negative predictive value	TN / (TN + FN)	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	sensitivity / (1 - specificity)	How much the odds of the disease increase when a test is positive

Question stats

A	19.1%
B	51.8%
C	6.2%
D	13.1%
E	9.7%

51.8% of users answered this question correctly

Session score = 7.5%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

	specificity)	
Likelihood ratio for a negative test result	$(1 - \text{sensitivity}) / \text{specificity}$	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 68 of 131



Which one of the following statements regarding epidemiological measures is correct?



- A. Cross-sectional surveys can be used to estimate the prevalence of a condition in the population
- B. In chronic diseases the incidence is much greater than the prevalence
- C. Incidence = prevalence * duration of condition
- D. The prevalence is the number of new cases per population in a given time period
- E. Pre-test probability = 1 / incidence

Question stats

A	<div></div>	70.9%
B	<div></div>	3.5%
C	<div></div>	8.7%
D	<div></div>	9.3%
E	<div></div>	7.6%

70.9% of users answered this question correctly

Session score = 7.4%

Incidence and prevalence

These two terms are used to describe the frequency of a condition in a population.

The **incidence** is the number of new cases per population in a given time period.

For example, if condition X has caused 40 new cases over the past 12 months per 1,000 of the population the annual incidence is 0.04 or 4%.

The **prevalence** is the total number of cases per population at a particular point in time.

For example, imagine a questionnaire is sent to 2,500 adults asking them how much they weigh. If from this sample population of 500 of the adults were obese then the prevalence of obesity would be 0.2 or 20%.

Relationship

- prevalence = incidence * duration of condition
- in chronic diseases the prevalence is much greater than the incidence
- in acute diseases the prevalence and incidence are similar. For conditions such as the common cold the incidence may be greater than the prevalence

Rate question:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 69 of 131



Which one of the following statements regarding odds and odds ratio is correct?

- A. Odds ratio = 1 / attributable risk
- B. Is always between 0 and 1 (when expressed as a decimal)
- C. **The odds ratio approximates to relative risk if the outcome of interest is rare**
- D. Odds ratios are the most commonly reported measure in cohort studies
- E. When applied to survival analysis is termed the hazard ratio



Question stats

A	<div></div>	8.2%
B	<div></div>	11.9%
C	<div></div>	33.1%
D	<div></div>	25.4%
E	<div></div>	21.4%

33.1% of users answered this question correctly

Session score = 7.2%

Odds and odds ratio

Odds are a ratio of the number of people who incur a particular outcome to the number of people who do not incur the outcome. The odds ratio may be defined as the ratio of the odds of a particular outcome with experimental treatment and that of control.

Odds ratios are the usual reported measure in case-control studies. It approximates to relative risk if the outcome of interest is rare.

For example, if we look at a trial comparing the use of paracetamol for dysmenorrhoea compared to placebo we may get the following results

	Total number of patients	Achieved = 50% pain relief
Paracetamol	60	40
Placebo	90	30

The odds of achieving significant pain relief with paracetamol = $40 / 20 = 2$

The odds of achieving significant pain relief with placebo = $30 / 60 = 0.5$

Therefore the odds ratio = $2 / 0.5 = 4$

Rate question:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Questions 70 to 72 of 131



Theme: Screening test statistics

- A 50/300
- B 300/400
- C 50/350
- D 50/400
- E 100/350
- F 350/400
- G 350/450
- H 300/650

A new blood test is developed to screen for ovarian cancer. A study produces the following results:

	Disease present	Disease not present
New test positive	300	100
New test negative	50	350

For each of the following give the correct value:

70. Positive predictive value

50/300

The correct answer is 300/400

71. Specificity

50/300

The correct answer is 350/450

72. Negative predictive value

50/300

The correct answer is 350/400

Question stats

Average score for registered users:

70		88.8%
71		75.2%
72		75.7%

Session score = 6.9%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	$TP / (TP + FN)$	Proportion of patients with the condition who have a positive test result
Specificity	$TN / (TN + FP)$	Proportion of patients without the condition who have a negative test result
Positive predictive value	$TP / (TP + FP)$	The chance that the patient has the condition if the diagnostic test is positive
Negative predictive value	$TN / (TN + FN)$	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	$\text{sensitivity} / (1 - \text{specificity})$	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	$(1 - \text{sensitivity}) / \text{specificity}$	How much the odds of the disease decrease when a test is negative

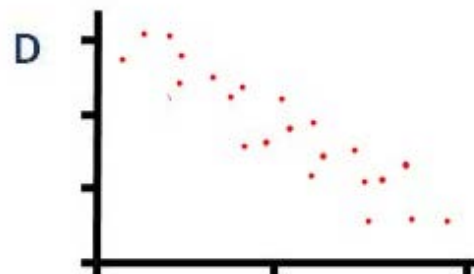
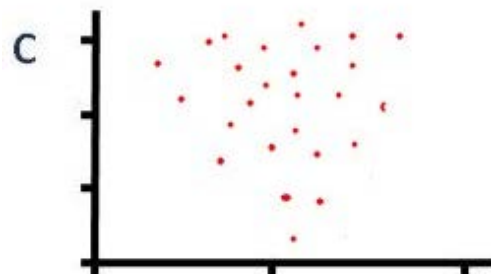
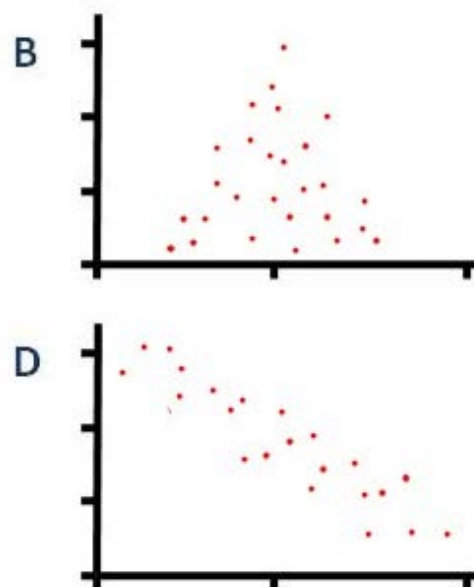
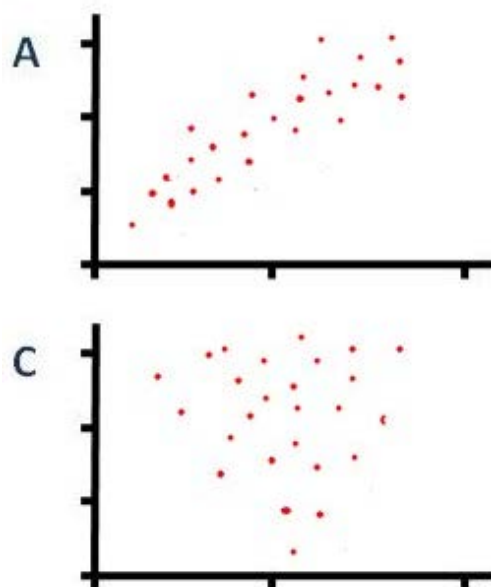
Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

Question 73 of 131



You review four meta-analyses as part of an educational presentation you are preparing. The funnel plots below summarise the studies which are included in each meta-analysis, with the treatment effect on the x-axis and study size on the y-axis.



Question stats

A	5.2%
B	58.5%
C	27.6%
D	3.6%
E	5.2%

58.5% of users answered this question correctly

Session score = 6.8%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Which one of the funnel plots suggests an absence of publication bias?



- Funnel plot A
- Funnel plot B
- Funnel plot C
- Funnel plot D
- None of them

The symmetrical, funnel shape indicates an absence of publication bias.

Funnel plot

A funnel plot is primarily used to demonstrate the existence of publication bias in meta-analyses. Funnel plots are usually drawn with treatment effects on the horizontal axis and study size on the vertical axis.

Interpretation

- a symmetrical, inverted funnel shape indicates that publication bias is unlikely
- conversely, an asymmetrical funnel indicates a relationship between treatment effect and study size. This indicates either publication bias or a

systematic difference between smaller and larger studies ('small study effects')


Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)






Question 74 of 131



A study is performed to assess the correlation between age and systolic blood pressure. Which one of the following statements regarding the calculation of the correlation coefficient, r , is incorrect?

- A. A value of r greater than 0 implies a positive correlation between age and systolic blood pressure
- B. If $r = 0$ then there is no correlation between systolic blood pressure and age
- C. r may lie anywhere between -1 and 1
-  D. May be used to predict systolic blood pressure for a given age
- E. Do not provide evidence of cause and effect

Question stats

A		8%
B		11.5%
C		17.2%
D		40.5%
E		22.8%

40.5% of users answered this question correctly

Session score = 6.8%

Linear regression is needed to predict systolic blood pressure in this scenario

Correlation and linear regression

Two measurements, or variables, may be plotted on a scatter plot. For example, age may be marked along the x axis and systolic blood pressure along the y axis

Correlation

The correlation coefficient (sometimes referred to as Pearson's product-moment coefficient) indicates how closely the points lie to a line drawn through the plotted data. It is denoted by the value r which may lie anywhere between -1 and 1.

For example

- $r = 1$ - strong positive correlation (e.g. systolic blood pressure always increases with age)
- $r = 0$ - no correlation (e.g. there is no correlation between systolic blood pressure and age)
- $r = -1$ - strong negative correlation (e.g. systolic blood pressure always decreases with age)

Whilst correlation coefficients give information about how one variable may increase or decrease as another variable increases they do not give information about how much the variable will change. They also do not provide information on cause and effect

Linear regression

In contrast to the correlation coefficient, linear regression may be used to predict how much one variable changes when a second variable is changed. A regression equation may be formed, $y = a + bx$, where

- y = the variable being calculated
- a = the intercept value, when $x = 0$

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

- b = the slope of the line or regression coefficient. Simply put, how much y changes for a given change in x
- x = the second variable

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 75 of 131



Which one of the following statements regarding significance tests is incorrect?

- A. Parametric data is usually normally distributed
- B. Student's t-test may be paired or unpaired
- C. Pearson's product-moment coefficient is used to assess correlation between two variables
- ✓ D. **Chi-squared test is used to compare parametric data**
- E. Paired data refers to data obtained from a single group of patients

Question stats

A	4.1%
B	4.7%
C	5.1%
D	75.9%
E	10.1%

75.9% of users answered this question correctly

Session score = 6.7%

Significance tests: types

The type of significance test used depends on whether the data is parametric (something which can be measured, usually normally distributed) or non-parametric

Parametric tests

- Student's t-test - paired or unpaired
- Pearson's product-moment coefficient - correlation

Non-parametric tests

- Mann-Whitney - unpaired data
- Wilcoxon matched-pairs - compares two sets of observations on a single sample
- chi-squared test - used to compare proportions or percentages
- Spearman, Kendall rank - correlation

Paired data refers to data obtained from a single group of patients, e.g. Measurement before and after an intervention. Unpaired data comes from two different groups of patients, e.g. Comparing response to different interventions in two groups

Rate question:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 76 of 131



A study looks at adding a new antiplatelet drug in addition to aspirin to patients who've had a stroke. One hundred and seventy patients are enrolled for the study with 120 receiving the new drug in addition to aspirin and the remainder receiving just aspirin. After 5 years 18 people who received the new drug had a further stroke compared to 10 people who just received aspirin. What is the number needed to treat?

- A. 8
- B. 15
- C. 1.8
- D. 20
- E. 10



$$\text{NNT} = 1 / (\text{CER} - \text{EER}), \text{ or } 1 / \text{Absolute Risk Reduction}$$

Control event rate = $10 / 50 = 0.2$

Experimental event rate = $18 / 120 = 0.15$

Absolute risk reduction = $0.2 - 0.15 = 0.05$

Number needed to treat = $1 / 0.05 = 20$

Numbers needed to treat and absolute risk reduction

Numbers needed to treat (NNT) is a measure that indicates how many patients would require an intervention to reduce the expected number of outcomes by one

It is calculated by $1/(\text{Absolute risk reduction})$ and is rounded to the next highest whole number

Experimental event rate (EER) = (Number who had particular outcome with the intervention) / (Total number who had the intervention)

Control event rate (CER) = (Number who had particular outcome with the control/ (Total number who had the control)

Absolute risk reduction = CER-EER or EER-CER?

The absolute risk reduction (ARR) may be calculated by finding the absolute difference between the control event rate (CER) and the experimental event rate (EER). You will often either version of the above listed in different sources. In some ways it doesn't matter which you use as you will end up with the same answer but from a technical point of view:

- if the outcome of the study is undesirable then $\text{ARR} = \text{CER} - \text{EER}$
- if the outcome of the study is desirable then $\text{ARR}^* = \text{EER} - \text{CER}$

Question stats

A	6%
B	7.8%
C	7.7%
D	70.5%
E	8%

70.5% of users answered this question correctly

Session score = 6.6%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

*this may more accurately be termed absolute benefit increase, rather than absolute risk reduction

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 77 of 131


A study is designed to see whether the degree of chest pain is linked to the troponin I value for patients admitted following a myocardial infarction. The pain is assessed using a scale of 1-10, with 10 representing the worst pain that the patient has ever experienced. Which one of the following significance tests is it most appropriate to use to investigate this link?

- A. Student's t-test
- B. Chi-squared test
- ✓ C. **Spearman's rank correlation coefficient**
- D. Pearson's product-moment coefficient
- E. Mann-Whitney test

This scenario looks at whether the values are correlated. As the data is non-parametric, particularly the observation based pain scale, Spearman's rank correlation coefficient should be used.

Significance tests: types

The type of significance test used depends on whether the data is parametric (something which can be measured, usually normally distributed) or non-parametric

Parametric tests

- Student's t-test - paired or unpaired
- Pearson's product-moment coefficient - correlation

Non-parametric tests

- Mann-Whitney - unpaired data
- Wilcoxon matched-pairs - compares two sets of observations on a single sample
- chi-squared test - used to compare proportions or percentages
- Spearman, Kendall rank - correlation

Paired data refers to data obtained from a single group of patients, e.g. Measurement before and after an intervention. Unpaired data comes from two different groups of patients, e.g. Comparing response to different interventions in two groups

Rate question:
Question stats

A		18.8%
B		9.5%
C		39.3%
D		23.5%
E		8.9%

39.3% of users answered this question correctly

Session score = 6.5%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 78 of 131



Which one of the following statements regarding significance tests is correct?



- A. The chance of making a type I error is not affected by sample size
- B. The probability of making a type II error is termed alpha
- C. Type I errors are false negatives
- D. A p value of 0.1 or less is usually deemed significant
- E. A type III error is defined as a study which has insufficient power

Question stats

A	<div></div>	40.2%
B	<div></div>	10.2%
C	<div></div>	25.9%
D	<div></div>	15.9%
E	<div></div>	7.9%

40.2% of users answered this question correctly

Session score = 6.4%

Significance tests

A null hypothesis (H_0) states that two treatments are equally effective (and is hence negatively phrased). A significance test uses the sample data to assess how likely the null hypothesis is to be correct.

For example:

- 'there is no difference in the prevalence of colorectal cancer in patients taking low-dose aspirin compared to those who are not'

The alternative hypothesis (H_1) is the opposite of the null hypothesis, i.e. There is a difference between the two treatments

The **p value** is the probability of obtaining a result by chance at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. It is therefore equal to the chance of making a type I error (see below).

Two types of errors may occur when testing the null hypothesis

- type I: the null hypothesis is rejected when it is true - i.e. Showing a difference between two groups when it doesn't exist, a false positive. This is determined against a preset significance level (termed alpha). As the significance level is determined in advance the chance of making a type I error is not affected by sample size. It is however increased if the number of end-points are increased. For example if a study has 20 end-points it is likely one of these will be reached, just by chance.
- type II: the null hypothesis is accepted when it is false - i.e. Failing to spot a difference when one really exists, a false negative. The probability of making a type II error is termed beta. It is determined by both sample size and alpha

	Study accepts H_0	Study rejects H_0
Reality H_0		Type 1 error (alpha)

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Reality H_1	Type 2 error (beta)	Power (1 - beta)
---------------	---------------------	------------------

The power of a study is the probability of (correctly) rejecting the null hypothesis when it is false

- power = 1 - the probability of a type II error
- power can be increased by increasing the sample size

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 79 to 81 of 131



Theme: Key trials: hypertension

- A STOP-2
- B LIFE
- C ASCOT
- D HOT
- E MERIT
- F ACCOMPLISH
- G ALLHAT
- H INSIGHT

Question stats

Average score for registered users:

79	<div></div>	35.9%
80	<div></div>	31.7%
81	<div></div>	40.3%

Session score = 7.4%

For each one of the following please select the relevant trial:

- 79.** Demonstrated that lowering blood pressure was the most important factor in the elderly population, rather than the choice of medication



STOP-2

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

- 80.** Demonstrated the efficacy of thiazide diuretics in preventing cardiovascular disease. The trial also included a large number of non-white patients.



STOP-2

The correct answer is ALLHAT

- 81.** Resulted in a major shift away from the use of beta-blockers in the management of hypertension



STOP-2

The correct answer is ASCOT

Key trials: hypertension

The following table summarises some of the key trials that have altered the approach to hypertension:

STOP-2	<p>The 1999 Swedish Trial in Old Patients with Hypertension-2 study looked at whether older drugs (beta-blockers or thiazides) or newer drugs (ACE inhibitors or calcium channel blockers) were better at preventing fatal cardiovascular disease.</p> <p>Main results</p> <ul style="list-style-type: none">• old and new antihypertensive drugs were similar in prevention of cardiovascular mortality or major events• decrease in blood pressure was the most important factor in the prevention of cardiovascular events in this age group• supports the NICE approach to using older agents first-line in the elderly population
ALLHAT	<p>The Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial was a large randomised controlled trial that was started in 1994 and reported in 2002. ALLHAT compared amlodipine, chlorthalidone (a thiazide), lisinopril and doxazosin. Over 40,000 patients aged 55 years or older who had hypertension with one other risk factor (for example diabetes) were included in the trial.</p> <p>ALLHAT is seen as a landmark trial due to the large size and inclusion of minority groups such as people of Afro-Caribbean descent.</p> <p>Main results</p> <ul style="list-style-type: none">• chlorthalidone outperformed lisinopril in preventing cardiovascular disease, a surprising finding which has been debated since (particularly in relation to the large number of black patients in the trial (ACE inhibitors are known to be less effective in this group)• the doxazosin arm was stopped prematurely due to a higher incidence of heart failure• 60% of patients reached the target blood pressure of 140/90 mmHg (it was generally thought prior to the trial that blood pressure targets were more difficult to achieve)
ASCOT	<p>The 2003 Anglo-Scandinavian Cardiac Outcomes Trial – Blood Pressure Lowering Arm was a double-blinded, randomised controlled trial of around 20,000 patients with hypertension and other risk factors. Patients were randomised to either atenolol (with the addition of bendroflumethiazide if needed) or amlodipine (with the addition perindopril if needed). The primary outcome was non-fatal myocardial infarction (MI) and fatal ischaemic heart disease (IHD).</p> <p>Main results</p> <ul style="list-style-type: none">• the study was stopped prematurely because of a higher death rate in the atenolol assigned group• the group receiving amlodipine-based regimes had a non-significant 10% reduction in primary outcomes (non-fatal MI plus fatal IHD) and significant reductions in nearly all secondary cardiovascular endpoints and new-onset diabetes• the trial resulted in a major shift away from the use of beta-blockers in the management of hypertension

Rate question:

Question 82 of 131



A study is performed to find the normal reference range for IgE levels in adults. Assuming IgE levels follow a normal distribution, what percentage of adults will have an IgE level higher than 2 standard deviations from the mean?



- A. 1.25%
- B. 2.3%
- C. 1.96%
- D. 5%
- E. 0.5%

For normally distributed data 95.4% of values lie within 2 standard deviations of the mean, leaving 4.6% outside this range. Therefore 2.3% of values will be higher and 2.3% will be lower than 2 standard deviations from the mean. This figure is sometimes approximated to 2.5%

Normal distribution

The normal distribution is also normal as Gaussian distribution or 'bell-shaped' distribution. It describes the spread of many biological and clinical measurements

Properties of the Normal distribution

- symmetrical i.e. mean = mode = median
- 68.3% of values lie within 1 SD of the mean
- 95.4% of values lie within 2 SD of the mean
- 99.7% of values lie within 3 SD of the mean
- this is often reversed, so that within 1.96 SD of the mean lie 95% of the sample values
- the range of the mean - (1.96 * SD) to the mean + (1.96 * SD) is called the 95% confidence interval, i.e. if a repeat sample of 100 observations are taken from the same group 95 of them would be expected to lie in that range

Standard deviation

- the standard deviation (SD) represents the average difference each observation in a sample lies from the sample mean
- SD = square root (variance)

Rate question:

Question stats

A	5%
B	44.1%
C	28.3%
D	19.3%
E	3.2%

44.1% of users answered this question correctly

Session score = 7.3%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 83 of 131



Which one of the following best describes the characteristics of a negatively skewed distribution?



- A. Median < mode < mean
- B. Mean < median < mode
- C. Mode < mean < median
- D. Median < mean < mode
- E. Mean < mode < median

Skewed distributions

- alphabetical order: mean - median - mode
- '>' for positive, '<' for negative

Question stats

A	<div></div>	10.8%
B	<div></div>	52.5%
C	<div></div>	17.3%
D	<div></div>	8.9%
E	<div></div>	10.6%

52.5% of users answered this question correctly

Session score = 7.2%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Skewed distributions

Normal distributions: mean = median = mode

Positively skewed distribution: mean > median > mode

Negatively skewed distribution mean < median < mode

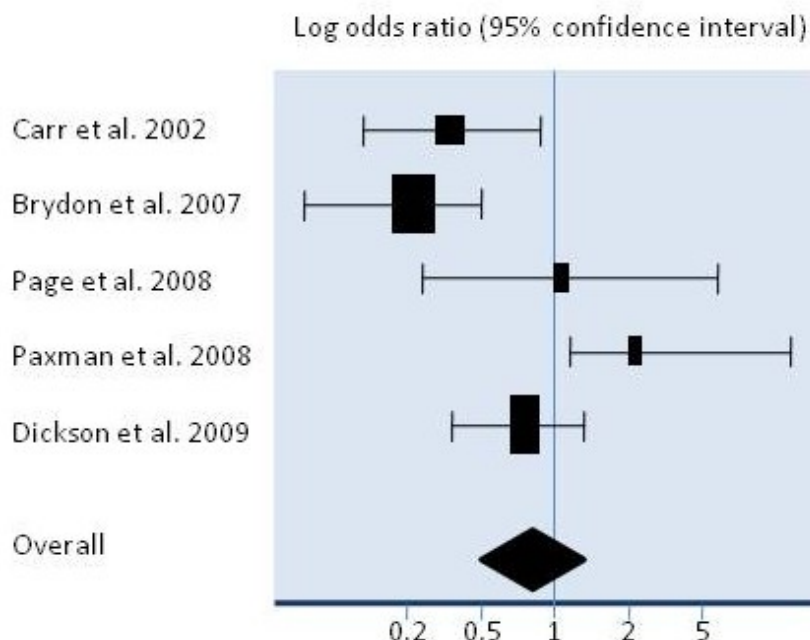
To remember the above note how they are in alphabetical order, think positive going forward with '>', whilst negative going backwards '<'

Rate question:

Question 84 of 131



You are reviewing the results of a meta-analysis for an educational presentation. It looks at the association between a new oral contraceptive pill with cervical cancer. Five studies reported the odds ratio of developing cervical cancer on the new pill compared to a second generation combined oral contraceptive. The results are displayed below:



Which one of the trials shows a non-significant reduction in the incidence of cervical cancer?



- A. Dickson et al
- B. None of them
- C. Carr et al + Brydon et al
- D. Paxman et al
- E. Page et al

The 95% confidence interval of the Dickson study crosses the line indicating a non-significant result. Page et al shows a non-significant increase in the incidence of cervical cancer.

Forest plots

Forest plots are usually found in meta-analyses and provide a graphical representation of the strength of evidence of the constituent trials.

The name of the trials is listed down the left hand side, usually in chronological

Question stats

A	53%
B	2.3%
C	9.8%
D	16.8%
E	18.1%

53% of users answered this question correctly

Session score = 7.1%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

order. On the right hand side the results of the studies are shown as squares centred on the point estimate of the result of each trial. The size of the square is proportional to the weight of the study in the meta-analysis. The line running through the square shows the confidence interval, usually at 95%. Beneath the individual trials is the summary result (i.e. The result of the meta-analysis) represented by a diamond.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 85 of 131



Which one of the following is equivalent to the pre-test probability?

- A. Post test odds / (1 + post-test odds)
- B. Pre-test odds x likelihood ratio
- C. The prevalence of a condition
- D. The incidence of a condition
- E. Post-test odds / likelihood ratio



The prevalence is the proportion of a population that have the condition at a point in time whilst the incidence is the rate at which new cases occur in a population during a specified time period.

Pre- and post- test odds and probability

Pre-test probability

The proportion of people with the target disorder in the population at risk at a specific time (point prevalence) or time interval (period prevalence)

For example, the prevalence of rheumatoid arthritis in the UK is 1%

Post-test probability

The proportion of patients with that particular test result who have the target disorder

Post-test probability = post test odds / (1 + post-test odds)

Pre-test odds

The odds that the patient has the target disorder before the test is carried out

Pre-test odds = pre-test probability / (1 - pre-test probability)

Post-test odds

The odds that the patient has the target disorder after the test is carried out

Post-test odds = pre-test odds x likelihood ratio

where the likelihood ratio for a positive test result = sensitivity / (1 - specificity)

Rate question:

Question stats

A	4.5%
B	28.5%
C	45.6%
D	13.6%
E	7.8%

45.6% of users answered this question correctly

Session score = 7.1%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 86 of 131



A new anti-epileptic drug is trialled for children with absence seizures. There are 250 children in the control group and 150 children assigned to take the new drug. After 4 months 100 children in the control group had had a seizure compared to 15 children in the group taking the new medication. What is the relative risk reduction?

- A. 4
- B. 30%
- C. 3.33
- D. 75%
- E. 40%



$$\text{Relative risk reduction} = (\text{EER} - \text{CER}) / \text{CER}$$

Experimental event rate, EER = $15 / 150 = 0.1$

Control event rate, CER = $100 / 250 = 0.4$

Relative risk reduction = $(\text{EER} - \text{CER}) / \text{CER} = (0.1 - 0.4) / 0.4 = -0.75$ or a 75% reduction

Relative risk

Relative risk (RR) is the ratio of risk in the experimental group (experimental event rate, EER) to risk in the control group (control event rate, CER)

To recap

- EER = rate at which events occur in the experimental group
- CER = rate at which events occur in the control group

For example, if we look at a trial comparing the use of paracetamol for dysmenorrhoea compared to placebo we may get the following results

	Total number of patients	Experienced significant pain relief
Paracetamol	100	60
Placebo	80	20

Experimental event rate, EER = $60 / 100 = 0.6$

Control event rate, CER = $20 / 80 = 0.25$

Question stats

A	12.8%
B	28.5%
C	7.4%
D	44.3%
E	6.9%

44.3% of users answered this question correctly

Session score = 7%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Therefore the relative risk = $EER / CER = 0.6 / 0.25 = 2.4$

If the risk ratio is > 1 then the rate of an event (in this case experiencing significant pain relief) is increased compared to controls. It is therefore appropriate to calculate the relative risk increase if necessary (see below).

If the risk ratio is < 1 then the rate of an event is decreased compared to controls. The relative risk reduction should therefore be calculated (see below).

Relative risk reduction (RRR) or **relative risk increase (RRI)** is calculated by dividing the absolute risk change by the control event rate

Using the above data, $RRI = (EER - CER) / CER = (0.6 - 0.25) / 0.25 = 1.4 = 140\%$

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 87 of 131



You are asked to design a study to assess whether living near electricity pylons is a risk factor for childhood leukaemia. What is the most appropriate type of study design?

- A. Cross-over trial
- B. Cohort study
- C. Cross-sectional survey
- ✓ D. Case-control study
- E. Randomised controlled trial

As the outcome (childhood leukaemia) is relatively rare a cohort study would take an extremely long time to provide significant results

Study design

The following table highlights the main features of the main types of study:

Randomised controlled trial	<p>Participants randomly allocated to intervention or control group (e.g. standard treatment or placebo)</p> <ul style="list-style-type: none"> • Practical or ethical problems may limit use
Cohort study	<p>Observational and prospective. Two (or more) are selected according to their exposure to a particular agent (e.g. medicine, toxin) and followed up to see how many develop a disease or other outcome.</p> <p>The usual outcome measure is the relative risk.</p> <ul style="list-style-type: none"> • Examples include Framingham Heart Study
Case-control study	<p>Observational and retrospective. Patients with a particular condition (cases) are identified and matched with controls. Data is then collected on past exposure to a possible causal agent for the condition.</p> <p>The usual outcome measure is the odds ratio.</p> <ul style="list-style-type: none"> • Inexpensive, produce quick results • Useful for studying rare conditions • Prone to confounding
Cross-sectional survey	<p>Provide a 'snapshot', sometimes called prevalence studies</p> <ul style="list-style-type: none"> • Provide weak evidence of cause and effect

Rate question:

Question stats

A	0.8%
B	35.5%
C	8%
D	54.4%
E	1.3%

54.4% of users answered this question correctly

Session score = 6.9%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Questions 88 to 90 of 131



Theme: Graphical representations of statistical data

- A Forest plot
- B Funnel plot
- C Box plot
- D Histogram
- E Box-and-whisker plot
- F Bar chart
- G Stem plot
- H X-Y variance plot
- I Quartile plot
- J Scatter plot

Please match each one of the following descriptions to the appropriate type of graph:

- 88.** Graphical representation using Cartesian coordinates to display values for two variables for a set of data



Forest plot

The correct answer is Scatter plot

- 89.** Graphical representation of the sample minimum, lower quartile, median, upper quartile and sample maximum



Forest plot

The correct answer is Box-and-whisker plot

- 90.** Found in meta-analyses and provide a graphical representation of the strength of evidence of the constituent trials



Forest plot

Question stats

Average score for registered users:

88	<div style="width: 41.9%;"></div>	41.9%
89	<div style="width: 47%;"></div>	47%
90	<div style="width: 78.1%;"></div>	78.1%

Session score = 7.8%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Graphical representations of statistical data

The table below gives a brief summary of the main types of graphs used to represent statistical data.

Box-and-whisker plot	Graphical representation of the sample minimum, lower quartile, median, upper quartile and sample maximum
Funnel plot	Used to demonstrate the existence of publication bias in meta-analyses
Histogram	A graphical display of continuous data where the values have been categorised into a number of categories
Forest plot	Forest plots are usually found in meta-analyses and provide a graphical representation of the strength of evidence of the constituent trials
Scatter plot	Graphical representation using Cartesian coordinates to display values for two variables for a set of data
Kaplan-Meier survival plot	A plot of the Kaplan-Meier estimate of the survival function showing decreasing survival with time

Rate question:

Question 91 of 131



A randomised controlled trial is performed to look at a new drug to prevent hip fractures in postmenopausal women. Group A consists of 1,000 women who take the new drug whilst group B contains 1,400 women taking a placebo. The hip fracture rate in group A is 2% and in group B is 4%. What is the number needed to treat to prevent one hip fracture?



- A. 10
- B. 50
- C. 6
- D. 12
- E. 2

$$\text{NNT} = 1 / (\text{CER} - \text{EER}), \text{ or } 1 / \text{Absolute Risk Reduction}$$

They key to answering this question is to ignore irrelevant data such as the number of patients in each group.

Control event rate = 4% = 0.04

Experimental event rate = 2% = 0.02

Absolute risk reduction = 0.04 - 0.02 = 0.02

Number needed to treat = 1 / 0.02 = 50

Numbers needed to treat and absolute risk reduction

Numbers needed to treat (NNT) is a measure that indicates how many patients would require an intervention to reduce the expected number of outcomes by one

It is calculated by $1/(\text{Absolute risk reduction})$ and is rounded to the next highest whole number

Experimental event rate (EER) = (Number who had particular outcome with the intervention) / (Total number who had the intervention)

Control event rate (CER) = (Number who had particular outcome with the control/ (Total number who had the control)

Absolute risk reduction = CER-EER or EER-CER?

The absolute risk reduction (ARR) may be calculated by finding the absolute difference between the control event rate (CER) and the experimental event rate (EER). You will often either version of the above listed in different sources. In some ways in doesn't matter which you use as you will end up with the same answer but from a technical point of view:

Question stats

A	2.6%
B	77.1%
C	3.7%
D	4.5%
E	12.1%

77.1% of users answered this question correctly

Session score = 7.7%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

- if the outcome of the study is undesirable then $ARR = CER - EER$
- if the outcome of the study is desirable then $ARR^* = EER - CER$

*this may more accurately be termed absolute benefit increase, rather than absolute risk reduction

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 92 of 131



A 31-year-old woman is diagnosed with familial hypercholesterolaemia. You discuss the possibility of screening her relatives. The patient reports that her father has a normal cholesterol level. What is the chance her brother will also be affected?



- A. 50%
- B. 66%
- C. 25%
- D. 100%
- E. 0%

As familial hypercholesterolaemia is autosomal dominant there is a 50% chance her brother will be affected.

Familial hypercholesterolaemia

Familial hypercholesterolaemia (FH) is an autosomal dominant condition that is thought to affect around 1 in 500 people. It results in high levels of LDL-cholesterol which, if untreated, may cause early cardiovascular disease (CVD). FH is caused by mutations in the gene which encodes the LDL-receptor protein.

Clinical diagnosis is now based on the **Simon Broome criteria**:

- in adults total cholesterol (TC) > 7.5 mmol/l and LDL-C > 4.9 mmol/l or children TC > 6.7 mmol/l and LDL-C > 4.0 mmol/l, plus:
- for definite FH: tendon xanthoma in patients or 1st or 2nd degree relatives or DNA-based evidence of FH
- for possible FH: family history of myocardial infarction below age 50 years in 2nd degree relative, below age 60 in 1st degree relative, or a family history of raised cholesterol levels

Management

- the use of CVD risk estimation using standard tables is not appropriate in FH as they do not accurately reflect the risk of CVD
- referral to a specialist lipid clinic is usually required
- the maximum dose of potent statins are usually required
- first-degree relatives have a 50% chance of having the disorder and should therefore be offered screening
- statins should be discontinued in women 3 months before conception due to the risk of congenital defects

Rate question:

Question stats

A	<div style="width: 66.1%;"></div>	66.1%
B	<div style="width: 1.8%;"></div>	1.8%
C	<div style="width: 26.1%;"></div>	26.1%
D	<div style="width: 3.8%;"></div>	3.8%
E	<div style="width: 2.2%;"></div>	2.2%

66.1% of users answered this question correctly

Session score = 7.6%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

External links

[NICE](#)

2008 Familial hypercholesterolaemia guidelines

Question 93 of 131



When establishing a screening programme, which one of the following is not a key criteria as defined by Wilson and Junger?

- A. There should be a recognised latent or early symptomatic stage
- B. The condition should be an important public health problem
- C. The test or examination should be acceptable to the population
- D. There should be agreed policy on whom to treat
- E. The condition should be potentially curable



Question stats

A	17%
B	8.2%
C	3.1%
D	27%
E	44.7%

44.7% of users answered this question correctly

Session score = 7.5%

Screening: Wilson and Junger criteria

1. The condition should be an important public health problem
2. There should be an acceptable treatment for patients with recognised disease
3. Facilities for diagnosis and treatment should be available
4. There should be a recognised latent or early symptomatic stage
5. The natural history of the condition, including its development from latent to declared disease should be adequately understood
6. There should be a suitable test or examination
7. The test or examination should be acceptable to the population
8. There should be agreed policy on whom to treat
9. The cost of case-finding (including diagnosis and subsequent treatment of patients) should be economically balanced in relation to the possible expenditure as a whole
10. Case-finding should be a continuous process and not a 'once and for all' project

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Rate question:

Question 94 of 131



A small study is designed to look at the link between drinking alcohol and liver cirrhosis. One hundred patients with liver cirrhosis were questioned and it was found that 80 of them drank excessive alcohol. As a control, one hundred patients without liver cirrhosis were questioned and only 20 of these patients drank excessively. What is the odds ratio of developing liver cirrhosis for people who drink excessively compared to those who do not?

- A. 2
- B. 4
- C. 0.25
- D. 16
- E. 3



Question stats

A	2.9%
B	40.4%
C	6.6%
D	48%
E	2%

48% of users answered this question correctly

Session score = 7.4%

Odds - remember a ratio of the number of people who incur a particular outcome to the number of people who do not incur the outcome

NOT a ratio of the number of people who incur a particular outcome to the total number of people

The odds of a patient with liver cirrhosis having a history of excessive drinking is $80/20 = 4$.

The odds of a patient without liver cirrhosis having a history of excessive drinking is $20/80 = 0.25$.

Therefore the odds ratio = $4 / 0.25 = 16$

Odds and odds ratio

Odds are a ratio of the number of people who incur a particular outcome to the number of people who do not incur the outcome. The odds ratio may be defined as the ratio of the odds of a particular outcome with experimental treatment and that of control.

Odds ratios are the usual reported measure in case-control studies. It approximates to relative risk if the outcome of interest is rare.

For example, if we look at a trial comparing the use of paracetamol for dysmenorrhoea compared to placebo we may get the following results

	Total number of patients	Achieved = 50% pain relief
Paracetamol	60	40
Placebo	90	30

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

The odds of achieving significant pain relief with paracetamol = $40 / 20 = 2$

The odds of achieving significant pain relief with placebo = $30 / 60 = 0.5$

Therefore the odds ratio = $2 / 0.5 = 4$

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 95 of 131


A study is designed to compare the calcium levels of males and females who developed inflammatory bowel disease in childhood. Which one of the following statistical tests is it most appropriate to use?

- A. Pearson's test
- B. Mann-Whitney test
- C. Chi-squared test
- ✓ D. Student's unpaired t-test
- E. Student's paired t-test

As the data is parametric and compares two independent sample from the same population an unpaired t-test is the most appropriate test to use

Significance tests: types

The type of significance test used depends on whether the data is parametric (something which can be measured, usually normally distributed) or non-parametric

Parametric tests

- Student's t-test - paired or unpaired
- Pearson's product-moment coefficient - correlation

Non-parametric tests

- Mann-Whitney - unpaired data
- Wilcoxon matched-pairs - compares two sets of observations on a single sample
- chi-squared test - used to compare proportions or percentages
- Spearman, Kendall rank - correlation

Paired data refers to data obtained from a single group of patients, e.g. Measurement before and after an intervention. Unpaired data comes from two different groups of patients, e.g. Comparing response to different interventions in two groups

Rate question:
Question stats

A	<div style="width: 10.2%;"></div>	10.2%
B	<div style="width: 9.1%;"></div>	9.1%
C	<div style="width: 10.3%;"></div>	10.3%
D	<div style="width: 41%;"></div>	41%
E	<div style="width: 29.5%;"></div>	29.5%

41% of users answered this question correctly

Session score = 7.4%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 96 of 131



A new screening test is developed for colorectal cancer. It is a blood test which detects a protein; the higher the level of the protein, the more likely a patient is to have colorectal cancer. If the cut-off for a positive test is increased, which one of the following will also be increased?



- A. The p value
- B. **Specificity**
- C. Likelihood ratio for a negative test result
- D. Sensitivity
- E. Negative predictive value

Increasing the cut-off of a positive test result will decrease the number of false positives and hence increase the specificity

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	TP / (TP + FN)	Proportion of patients with the condition who have a positive test result
Specificity	TN / (TN + FP)	Proportion of patients without the condition who have a negative test result
Positive predictive value	TP / (TP + FP)	The chance that the patient has the condition if the diagnostic test is positive
Negative predictive value	TN / (TN + FN)	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	sensitivity / (1 - specificity)	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	(1 - sensitivity) /	How much the odds of the disease decrease when a test is negative

Question stats

A		5.2%
B		37.7%
C		11.7%
D		38.3%
E		7%

37.7% of users answered this question correctly

Session score = 7.3%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

	specificity	
--	-------------	--

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 97 to 99 of 131



Theme: Screening test statistics

- A $TN / (TN + FN)$
- B $TP / (TP + FN)$
- C Sensitivity / $(1 - \text{specificity})$
- D $TP / (TP + FP)$
- E $TN / (TN + FP)$
- F $(1 - \text{sensitivity}) / \text{specificity}$

For each one of the following statistical terms listed below select the correct equation

TP = true positive; FP = false positive; TN = true negative; FN = false negative

97. Likelihood ratio for a positive test result



$TN / (TN + FN)$

The correct answer is Sensitivity / $(1 - \text{specificity})$

98. Negative predictive value



$TN / (TN + FN)$

99. Likelihood ratio for a negative test result



$TN / (TN + FN)$

The correct answer is $(1 - \text{sensitivity}) / \text{specificity}$

Question stats

Average score for registered users:

97	<div></div>	81.9%
98	<div></div>	86.4%
99	<div></div>	81.6%

Session score = 8.1%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

--	--	--

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	TP / (TP + FN)	Proportion of patients with the condition who have a positive test result
Specificity	TN / (TN + FP)	Proportion of patients without the condition who have a negative test result
Positive predictive value	TP / (TP + FP)	The chance that the patient has the condition if the diagnostic test is positive
Negative predictive value	TN / (TN + FN)	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	sensitivity / (1 - specificity)	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	(1 - sensitivity) / specificity	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

Question 100 of 131



A study is designed to assess a new proton pump inhibitor (PPI) in elderly patients who are taking aspirin. The new PPI is given to 120 patients whilst a control group of 240 is given the standard PPI. Over a five year period 24 of the group receiving the new PPI had an upper GI bleed compared to 60 who received the standard PPI. What is the absolute risk reduction?

- A. 15%
- B. 10%
- C. 12
- D. 5%
- E. 20



Question stats

A	4.1%
B	5.5%
C	4%
D	74.5%
E	11.9%

74.5% of users answered this question correctly

Session score = 8%

Absolute risk reduction = (Experimental event rate) - (Control event rate)

Control event rate = $60 / 240 = 0.25$

Experimental event rate = $24 / 120 = 0.2$

Absolute risk reduction = $0.25 - 0.2 = 0.05 = 5\%$ reduction

Numbers needed to treat and absolute risk reduction

Numbers needed to treat (NNT) is a measure that indicates how many patients would require an intervention to reduce the expected number of outcomes by one

It is calculated by $1/(\text{Absolute risk reduction})$ and is rounded to the next highest whole number

Experimental event rate (EER) = (Number who had particular outcome with the intervention) / (Total number who had the intervention)

Control event rate (CER) = (Number who had particular outcome with the control/ (Total number who had the control)

Absolute risk reduction = CER-EER or EER-CER?

The absolute risk reduction (ARR) may be calculated by finding the absolute difference between the control event rate (CER) and the experimental event rate (EER). You will often either version of the above listed in different sources. In some ways it doesn't matter which you use as you will end up with the same answer but from a technical point of view:

- if the outcome of the study is undesirable then $ARR = CER - EER$
- if the outcome of the study is desirable then $ARR^* = EER - CER$

*this may more accurately be termed absolute benefit increase, rather than absolute risk reduction

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

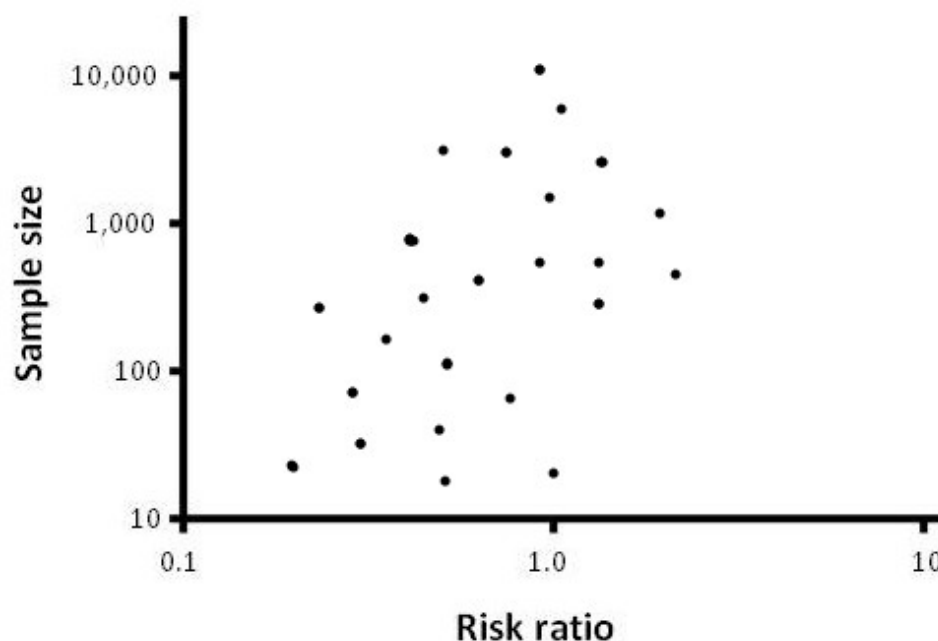
Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 101 of 131



A meta-analysis is performed looking at trials that investigate whether taking low-dose aspirin reduces the incidence of breast cancer. The results of the trials are summarised below:



Question stats

A	11.7%
B	8%
C	8.1%
D	42.6%
E	29.7%

42.6% of users answered this question correctly

Session score = 7.9%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

What is the most appropriate interpretation of this diagram?

- There is no publication bias
- There is publication bias by larger studies which fail to find a protective effect from taking aspirin
- There is publication bias by larger studies which demonstrate a protective effect from taking aspirin
- There is publication bias by smaller studies which fail to find a protective effect from taking aspirin
- There is publication bias by smaller studies which demonstrate a protective effect from taking aspirin

This funnel plot clearly shows a gap in the bottom right hand aspect of the diagram. This suggests a publication bias by studies which do not report a protective effect from taking aspirin, i.e. Small studies that didn't find a benefit with aspirin did not publish their results.

Funnel plot

A funnel plot is primarily used to demonstrate the existence of publication bias in meta-analyses. Funnel plots are usually drawn with treatment effects on the

horizontal axis and study size on the vertical axis.

Interpretation

- a symmetrical, inverted funnel shape indicates that publication bias is unlikely
- conversely, an asymmetrical funnel indicates a relationship between treatment effect and study size. This indicates either publication bias or a systematic difference between smaller and larger studies ('small study effects')

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 102 of 131



A study is proposed to ascertain whether childhood obesity increases the risk of cancer in later life. What is the most appropriate form of study design?



- A. Cohort study
- B. Case-control study
- C. Cross-over trial
- D. Randomised controlled trial
- E. Cross-sectional survey

A cohort study would provide more robust evidence than a case-control study.

Study design

The following table highlights the main features of the main types of study:

Randomised controlled trial	<p>Participants randomly allocated to intervention or control group (e.g. standard treatment or placebo)</p> <ul style="list-style-type: none"> Practical or ethical problems may limit use
Cohort study	<p>Observational and prospective. Two (or more) are selected according to their exposure to a particular agent (e.g. medicine, toxin) and followed up to see how many develop a disease or other outcome.</p> <p>The usual outcome measure is the relative risk.</p> <ul style="list-style-type: none"> Examples include Framingham Heart Study
Case-control study	<p>Observational and retrospective. Patients with a particular condition (cases) are identified and matched with controls. Data is then collected on past exposure to a possible causal agent for the condition.</p> <p>The usual outcome measure is the odds ratio.</p> <ul style="list-style-type: none"> Inexpensive, produce quick results Useful for studying rare conditions Prone to confounding
Cross-sectional survey	<p>Provide a 'snapshot', sometimes called prevalence studies</p> <ul style="list-style-type: none"> Provide weak evidence of cause and effect

Rate question:

Question stats

A	<div style="width: 60.9%;"></div>	60.9%
B	<div style="width: 34%;"></div>	34%
C	<div style="width: 0.7%;"></div>	0.7%
D	<div style="width: 1.3%;"></div>	1.3%
E	<div style="width: 3%;"></div>	3%

60.9% of users answered this question correctly

Session score = 7.8%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 103 of 131


What level of evidence does a randomised control trial offer?



- A. Ia
- B. Ib
- C. IIa
- D. IIb
- E. IV

Question stats

A	<div style="width: 21.1%;"></div>	21.1%
B	<div style="width: 42.3%;"></div>	42.3%
C	<div style="width: 15.9%;"></div>	15.9%
D	<div style="width: 8.5%;"></div>	8.5%
E	<div style="width: 12.3%;"></div>	12.3%

42.3% of users answered this question correctly

Session score = 7.8%

Study design: evidence and recommendations
Levels of evidence

- Ia - evidence from meta-analysis of randomised controlled trials
- Ib - evidence from at least one randomised controlled trial
- IIa - evidence from at least one well designed controlled trial which is not randomised
- IIb - evidence from at least one well designed experimental trial
- III - evidence from case, correlation and comparative studies
- IV - evidence from a panel of experts

Grading of recommendation

- Grade A - based on evidence from at least one randomised controlled trial (i.e. Ia or Ib)
- Grade B - based on evidence from non-randomised controlled trials (i.e. IIa, IIb or III)
- Grade C - based on evidence from a panel of experts (i.e. IV)

Rate question:
RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 104 of 131



A new study is proposed to look at the effectiveness of a new blood pressure medication. The study design group decide to perform a double-blinded randomised controlled trial. What type of bias should be avoided by ensuring the patient and doctor are blinded?

- A. Recall bias
- B. Verification bias
- C. Non-responder bias
- D. Confounding bias
- E. **Expectation bias**



Question stats

A	7.2%
B	8.7%
C	3.9%
D	16.2%
E	64%

64% of users answered this question correctly

Session score = 7.7%

Bias

Bias describes the situation in a trial where one outcome is systematically favoured. A number of different types of bias are recognised:

Selection bias	Error in assigning individuals to groups leading to differences which may influence outcome. Subtypes include sampling bias where the subjects are not representative of the population. This may be due to volunteer bias . An example of volunteer bias would be a study looking at the prevalence of <i>Chlamydia</i> in the student population. Students who are at risk of <i>Chlamydia</i> may be more, or less, likely to participate in the study. A similar concept is non-responder bias . If a survey on dietary habits was sent out in the post to random households it is likely that the people who didn't respond would have poorer diets than those who did.
Publication bias	Failure to publish results from valid studies, often as they showed a negative or uninteresting result. Important in meta-analyses where studies showing negative results may be excluded.
Work-up bias (verification bias)	Mainly seen in studies trying to validate a new diagnostic test. Refers to the gold-standard diagnostic test being done more frequently in patients who have already had a positive new test.
Expectation bias	Only a problem in non-blinded trials. Observers may subconsciously measure or report data in a way that favours the expected study outcome.
Recall bias	A particular problem in case-control studies.

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Rate question:

Question 105 of 131



A study is performed comparing two chemotherapy regimes for patients with small cell lung cancer. The end point of the study is survival time. Which one of the following types statistical measures is it most appropriate to compare survival time with?

- A. Odds ratio
- B. Pearson's product-moment coefficient
- C. Relative risk
- D. Hazard ratio
- E. Absolute risk reduction



Question stats

A	<div></div>	13.6%
B	<div></div>	26.8%
C	<div></div>	10.8%
D	<div></div>	32.7%
E	<div></div>	16%

32.7% of users answered this question correctly

Session score = 7.6%

Hazard ratio

The hazard ratio (HR) is similar to relative risk but is used when risk is not constant to time. It is typically used when analysing survival over time

Rate question:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Questions 106 to 108 of 131



Theme: Significance tests: types

- A** Student's t-test - paired
- B** Mann-Whitney test
- C** Chi-squared test
- D** Pearson's product-moment coefficient
- E** Student's t-test - unpaired
- F** Wilcoxon matched-pairs
- G** Spearman's rank correlation coefficient
- H** Kendall tau rank correlation coefficient

For each one of the following scenarios select the most appropriate significance test:

106. Compare percentages

Student's t-test - paired

The correct answer is Chi-squared test



107. Compares two sets of non-parametric observations on a single sample

Student's t-test - paired

The correct answer is Wilcoxon matched-pairs



108. Assess degree of correlation between normally distributed data

Student's t-test - paired

The correct answer is Pearson's product-moment coefficient



Question stats

Average score for registered users:

106		75.5%
107		42.9%
108		64.2%

Session score = 7.4%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Significance tests: types

The type of significance test used depends on whether the data is parametric (something which can be measured, usually normally distributed) or non-parametric

Parametric tests

- Student's t-test - paired or unpaired
- Pearson's product-moment coefficient - correlation

Non-parametric tests

- Mann-Whitney - unpaired data
- Wilcoxon matched-pairs - compares two sets of observations on a single sample
- chi-squared test - used to compare proportions or percentages
- Spearman, Kendall rank - correlation

Paired data refers to data obtained from a single group of patients, e.g. Measurement before and after an intervention. Unpaired data comes from two different groups of patients, e.g. Comparing response to different interventions in two groups

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 109 of 131



What is the main advantage of non-inferiority trials when testing a new drug?

- A. Prevents ethical dilemmas
- B. Robust results are produced
- C. Useful for conditions where there is no proven drug treatment
- D. Useful for conditions where there is a high placebo response rate
- E. **Small sample size is required**



Question stats

A	10.6%
B	3.8%
C	12.8%
D	8.3%
E	64.6%

64.6% of users answered this question correctly

Session score = 7.3%

Study design: new drugs

When a new drug is launched there are a number of options available in terms of study design. One option is a placebo controlled trial. Whilst this may provide robust evidence it may be considered unethical if established treatments are available and it also does not provide a comparison with standard treatments.

If a drug is therefore to be compared to an existing treatment a statistician will need to decide whether the trial is intended to show superiority, equivalence or non-inferiority:

- superiority: whilst this may seem the natural aim of a trial one problem is the large sample size needed to show a significant benefit over an existing treatment
- equivalence: an equivalence margin is defined (-delta to +delta) on a specified outcome. If the confidence interval of the difference between the two drugs lies within the equivalence margin then the drugs may be assumed to have a similar effect
- non-inferiority: similar to equivalence trials, but only the lower confidence interval needs to lie within the equivalence margin (i.e. -delta). Small sample sizes are needed for these trials. Once a drug has been shown to be non-inferior large studies may be performed to show superiority

It should be remembered that drug companies may not necessarily want to show superiority over an existing product. If it can be demonstrated that their product is equivalent or even non-inferior then they may compete on price or convenience.

Rate question:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

External links

[European Medicines Agency](#)

Further information on trial design

Question 110 of 131



Which one of the following would invalidate the use of the Student's t-test when performing a significance test?



- A. Using it with unpaired data
- B. Using it with data that is not normally distributed
- C. Using it with data that has a small sample size
- D. Using it to test whether the slope of a regression line differs significantly from 0
- E. Using it to test a null hypothesis

Data must be parametric, i.e. follows a normal distribution

Significance tests: types

The type of significance test used depends on whether the data is parametric (something which can be measured, usually normally distributed) or non-parametric

Parametric tests

- Student's t-test - paired or unpaired
- Pearson's product-moment coefficient - correlation

Non-parametric tests

- Mann-Whitney - unpaired data
- Wilcoxon matched-pairs - compares two sets of observations on a single sample
- chi-squared test - used to compare proportions or percentages
- Spearman, Kendall rank - correlation

Paired data refers to data obtained from a single group of patients, e.g. Measurement before and after an intervention. Unpaired data comes from two different groups of patients, e.g. Comparing response to different interventions in two groups

Rate question:

Question stats

A	<div></div>	7.2%
B	<div></div>	70.5%
C	<div></div>	4.4%
D	<div></div>	10.9%
E	<div></div>	7%

70.5% of users answered this question correctly

Session score = 7.3%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 111 of 131



Which one of the following statements regarding the use of the p-value in statistical hypothesis testing is correct?

- A. The p-value is the probability that the null hypothesis is true
- B. $1 - (\text{p-value})$ is the probability of the alternative hypothesis being true
- ✓ C. The null hypothesis is rejected if the p-value is smaller than or equal to the significance level
- D. The p-value is the probability that a replicating experiment would not yield the same conclusion
- E. The p-value is equal to the probability of making a type II error

Question stats

A		31.6%
B		6.6%
C		36.5%
D		8.1%
E		17.3%

36.5% of users answered this question correctly

Session score = 7.2%

Significance tests

A null hypothesis (H_0) states that two treatments are equally effective (and is hence negatively phrased). A significance test uses the sample data to assess how likely the null hypothesis is to be correct.

For example:

- 'there is no difference in the prevalence of colorectal cancer in patients taking low-dose aspirin compared to those who are not'

The alternative hypothesis (H_1) is the opposite of the null hypothesis, i.e. There is a difference between the two treatments

The **p value** is the probability of obtaining a result by chance at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. It is therefore equal to the chance of making a type I error (see below).

Two types of errors may occur when testing the null hypothesis

- type I: the null hypothesis is rejected when it is true - i.e. Showing a difference between two groups when it doesn't exist, a false positive. This is determined against a preset significance level (termed alpha). As the significance level is determined in advance the chance of making a type I error is not affected by sample size. It is however increased if the number of end-points are increased. For example if a study has 20 end-points it is likely one of these will be reached, just by chance.
- type II: the null hypothesis is accepted when it is false - i.e. Failing to spot a difference when one really exists, a false negative. The probability of making a type II error is termed beta. It is determined by both sample size and alpha

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

	Study accepts H_0	Study rejects H_0
Reality H_0		Type 1 error (alpha)
Reality H_1	Type 2 error (beta)	Power (1 - beta)

The power of a study is the probability of (correctly) rejecting the null hypothesis when it is false

- power = 1 - the probability of a type II error
- power can be increased by increasing the sample size

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 112 of 131



A new blood test which can show signs of myocardial damage within one hour of the onset of chest pain is developed. In a trial of 100 patients presenting with chest pain, 40 of the patients are later proven to have had myocardial ischaemia by conventional troponin tests. Of these patients the new test was positive in 20 cases. The new test was also positive in 20 of the remaining 60 patients later shown to have a negative troponin. What is the negative predictive value of the new test for myocardial ischaemia?



- A. 0.5
- B. 0.66
- C. 0.8
- D. Cannot calculate
- E. 0.33

The new test was negative in 20 of the patients later shown to have myocardial ischaemia (false negative) and negative in 40 patients confirmed not to have myocardial ischaemia (true negative)

Negative predictive value = $TN / (TN + FN)$

$$= 40 / (40 + 20) = 0.66$$

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	$TP / (TP + FN)$	Proportion of patients with the condition who have a positive test result
Specificity	$TN / (TN + FP)$	Proportion of patients without the condition who have a negative test result
Positive predictive value	$TP / (TP + FP)$	The chance that the patient has the condition if the diagnostic test is positive

Question stats

A	<div></div>	9.2%
B	<div></div>	68.5%
C	<div></div>	7.6%
D	<div></div>	5.8%
E	<div></div>	8.9%

68.5% of users answered this question correctly

Session score = 7.1%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Negative predictive value	$TN / (TN + FN)$	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	sensitivity / (1 - specificity)	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	(1 - sensitivity) / specificity	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 113 of 131



A study is designed to assess the efficacy of a new anti-hypertensive medication. Two groups of patients are randomly assigned, one to take the established drug for 3 months whilst the other takes the new drug for 3 months. Blood pressure is measured before and after the intervention. There is then a period off medication for 1 month. After this period has elapsed the medication that the groups receive is swapped around and again blood pressure is measured before and 3 months later. The difference in blood pressure after the respective medications is calculated for each patient. Which one of the following significance tests is it most appropriate to apply?



- A. Student's unpaired t-test
- B. **Student's paired t-test**
- C. Pearson's test
- D. Mann-Whitney test
- E. Chi-squared test

This describes a crossover study. As we are comparing parametric data from the same patients (they swapped medication halfway through the study) the Student's paired t-test should be used.

Significance tests: types

The type of significance test used depends on whether the data is parametric (something which can be measured, usually normally distributed) or non-parametric

Parametric tests

- Student's t-test - paired or unpaired
- Pearson's product-moment coefficient - correlation

Non-parametric tests

- Mann-Whitney - unpaired data
- Wilcoxon matched-pairs - compares two sets of observations on a single sample
- chi-squared test - used to compare proportions or percentages
- Spearman, Kendall rank - correlation

Paired data refers to data obtained from a single group of patients, e.g. Measurement before and after an intervention. Unpaired data comes from two different groups of patients, e.g. Comparing response to different interventions in two groups

Rate question:

Question stats

A	<div style="width: 19.9%;"></div>	19.9%
B	<div style="width: 56.7%;"></div>	56.7%
C	<div style="width: 7%;"></div>	7%
D	<div style="width: 10.2%;"></div>	10.2%
E	<div style="width: 6.3%;"></div>	6.3%

56.7% of users answered this question correctly

Session score = 7.1%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 114 of 131


In a normal distribution what percentage of values lie within 3 standard deviations of the mean?

- A. 68.3%
- B. 98.3%
- C. 95.4%
- D. 99.7%
- E. 97.2%


Question stats

A	7.2%
B	6.4%
C	3.8%
D	78.9%
E	3.6%

78.9% of users answered this question correctly

Session score = 7%

Normal distribution

The normal distribution is also normal as Gaussian distribution or 'bell-shaped' distribution. It describes the spread of many biological and clinical measurements

Properties of the Normal distribution

- symmetrical i.e. mean = mode = median
- 68.3% of values lie within 1 SD of the mean
- 95.4% of values lie within 2 SD of the mean
- 99.7% of values lie within 3 SD of the mean
- this is often reversed, so that within 1.96 SD of the mean lie 95% of the sample values
- the range of the mean - (1.96 * SD) to the mean + (1.96 * SD) is called the 95% confidence interval, i.e. if a repeat sample of 100 observations are taken from the same group 95 of them would be expected to lie in that range

Standard deviation

- the standard deviation (SD) represents the average difference each observation in a sample lies from the sample mean
- SD = square root (variance)

Rate question:

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Questions 115 to 117 of 131



Theme: Data types

- A** Binomial
- B** Discrete
- C** Nominal
- D** Ratio variable
- E** Interval variable
- F** Ordinal

For each of the following please select the closest matching data type:

- 115.** Observed values are confined to a certain values, usually a finite number of whole numbers



Binomial

The correct answer is Discrete

- 116.** A measurement where the difference between two values is meaningful



Binomial

The correct answer is Interval variable

- 117.** Hair colour



Binomial

The correct answer is Nominal

Question stats

Average score for registered users:

115		49%
116		48.4%
117		43.2%

Session score = 6.8%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Data types

Data type	Description
Nominal	Observed values can be put into set categories which have no particular order or hierarchy. You can count but not order or measure nominal data (for example birthplace)
Ordinal	Observed values can be put into set categories which themselves can be ordered (for example NYHA classification of heart failure symptoms)

Discrete	Observed values are confined to a certain values, usually a finite number of whole numbers (for example the number of asthma exacerbations in a year)
Continuous	Data can take any value with certain range (for example weight)
Binomial	Data may take one of two values (for example gender)
Interval	A measurement where the difference between two values is meaningful, such that equal differences between values correspond to real differences between the quantities that the scale measures (for example temperature)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 118 of 131



What is the correct formula to calculate the negative predictive value of a screening test?

TP = true positive; FP = false positive; TN = true negative; FN = false negative



- A. $TN / (TN + FN)$
- B. $TP / (TP + FP)$
- C. $TN / (TN + FP)$
- D. Sensitivity / (1 - specificity)
- E. $TP / (TP + FN)$

Question stats

A	<div style="width: 88.2%;"></div>	88.2%
B	<div style="width: 0.7%;"></div>	0.7%
C	<div style="width: 8.7%;"></div>	8.7%
D	<div style="width: 1.7%;"></div>	1.7%
E	<div style="width: 0.6%;"></div>	0.6%

88.2% of users answered this question correctly

Session score = 6.8%

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	$TP / (TP + FN)$	Proportion of patients with the condition who have a positive test result
Specificity	$TN / (TN + FP)$	Proportion of patients without the condition who have a negative test result
Positive predictive value	$TP / (TP + FP)$	The chance that the patient has the condition if the diagnostic test is positive
Negative predictive value	$TN / (TN + FN)$	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	$\text{sensitivity} / (1 - \text{specificity})$	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	$(1 - \text{sensitivity}) / \text{specificity}$	How much the odds of the disease decrease when a test is negative

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 119 of 131


A small study looks at the weight of patients diagnosed with type 2 diabetes mellitus. Overall 64 patients were reviewed. The average weight was 81 kg, with a standard deviation of 12 kg. What is the standard error of the mean?

- A. Square root (64 / 12)
- B. Square root (81 / 12)
- C. 12 / 9
- D. 9 / 12
- E. 1.5



Standard error of the mean = standard deviation / square root (number of patients)

The standard error of the mean is calculated by the standard deviation / square root (number of patients)

$$= 12 / \text{square root } (64) = 12 / 8 = 1.5$$

Standard error of the mean

The standard error of the mean (SEM) is a measure of the spread expected for the mean of the observations - i.e. how 'accurate' the calculated sample mean is from the true population mean

Key point

- SEM = SD / square root (n)
- where SD = standard deviation and n = sample size

Therefore the SEM gets smaller as the sample size (n) increases

A confidence interval for the mean can be calculated in a similar way to that for a single observation, i.e. The 95% confidence interval:

- lower limit = mean - (1.96 * SEM)
- upper limit = mean + (1.96 * SEM)

Rate question:

Question stats

A		11.9%
B		14.5%
C		18.4%
D		2.1%
E		53.1%

53.1% of users answered this question correctly

Session score = 6.7%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 120 of 131



A study looks at the use of amoxicillin in the treatment of acute sinusitis compared to placebo. The following results are obtained:

	Total number of patients	Number who achieved resolution of symptoms at 7 days
Amoxicillin	100	60
Placebo	75	30

What is the odds ratio a patient achieving resolution of symptoms at 7 days if they take amoxicillin compared to placebo?

- A. 1.5
- B. 0.5
- C. 2.25
- D. 0.6
- E. 1.66



Question stats

A		24.4%
B		5.8%
C		55.8%
D		8%
E		6%

55.8% of users answered this question correctly

Session score = 6.7%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Odds - remember a ratio of the number of people who incur a particular outcome to the number of people who do not incur the outcome

NOT a ratio of the number of people who incur a particular outcome to the total number of people

The odds of symptoms resolution with amoxicillin = $60 / 40 = 1.5$

The odds of symptoms resolution with placebo = $30 / 45 = (2/3)$

Therefore the odds ratio = $1.5 / (2/3) = 2.25$

Odds and odds ratio

Odds are a ratio of the number of people who incur a particular outcome to the number of people who do not incur the outcome. The odds ratio may be defined as the ratio of the odds of a particular outcome with experimental treatment and that of control.

Odds ratios are the usual reported measure in case-control studies. It approximates to relative risk if the outcome of interest is rare.

For example, if we look at a trial comparing the use of paracetamol for dysmenorrhoea compared to placebo we may get the following results

--	--	--

	Total number of patients	Achieved = 50% pain relief
Paracetamol	60	40
Placebo	90	30

The odds of achieving significant pain relief with paracetamol = $40 / 20 = 2$

The odds of achieving significant pain relief with placebo = $30 / 60 = 0.5$

Therefore the odds ratio = $2 / 0.5 = 4$

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 121 of 131



A new biochemical marker has been found which is increased in mothers who are carrying fetuses with Down's syndrome. The new blood test is trialled in 1,000 women over the age of 35 years. Of these women 20 were found to be carrying a fetus with Down's syndrome as assessed using standard measures. The new test was positive in 15 of the 20 cases but was also positive in 30 of the remaining 980 women. What is the positive predictive value of the test?

- A. 0.66
- B. 950/980
- C. 0.33
- D. 0.8
- E. 0.5



Question stats

A	7.4%
B	3.1%
C	80.3%
D	4.8%
E	4.4%

80.3% of users answered this question correctly

Session score = 6.6%

A contingency table can be constructed from the above data, as shown below:

	Down's	Not Down's
Test positive	15	30
Test negative	5	950

Positive predictive value = $TP / (TP + FP) = 15 / (15 + 30) = 0.33$

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	$TP / (TP + FN)$	Proportion of patients with the condition who have a positive test result
Specificity	$TN / (TN + FP)$	Proportion of patients without the condition who have a negative test result

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Positive predictive value	$TP / (TP + FP)$	The chance that the patient has the condition if the diagnostic test is positive
Negative predictive value	$TN / (TN + FN)$	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	sensitivity / (1 - specificity)	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	(1 - sensitivity) / specificity	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 122 of 131



A study looks at whether a new oral treatment for patients with heart failure can prevent hospital admissions. When reviewing the data how should it be decided if the study was statistically significant?

- A. p-value < 2 standard deviates from mean
- B. p-value < (1 - type II error)
- C. p-value < significance level
- D. p-value < power
- E. p-value < 0.05



The significance level of a test is defined as the probability of rejecting the null hypothesis when the null hypothesis is actually true (a Type I error). It is often represented by the Greek symbol alpha.

A study is only statistically significant if the p-value reaches the significance level set before the study is started. Popular levels of significance are 5% (0.05), 1% (0.01) and 0.1% (0.001).

Significance tests

A null hypothesis (H_0) states that two treatments are equally effective (and is hence negatively phrased). A significance test uses the sample data to assess how likely the null hypothesis is to be correct.

For example:

- 'there is no difference in the prevalence of colorectal cancer in patients taking low-dose aspirin compared to those who are not'

The alternative hypothesis (H_1) is the opposite of the null hypothesis, i.e. There is a difference between the two treatments

The **p value** is the probability of obtaining a result by chance at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. It is therefore equal to the chance of making a type I error (see below).

Two types of errors may occur when testing the null hypothesis

- type I: the null hypothesis is rejected when it is true - i.e. Showing a difference between two groups when it doesn't exist, a false positive. This is determined against a preset significance level (termed alpha). As the significance level is determined in advance the chance of making a type I error is not affected by sample size. It is however increased if the number of end-points are increased. For example if a study has 20 end-points it is likely one of these will be reached, just by chance.
- type II: the null hypothesis is accepted when it is false - i.e. Failing to spot

Question stats

A	2.8%
B	8.6%
C	26.5%
D	2%
E	60%

26.5% of users answered this question correctly

Session score = 6.6%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

a difference when one really exists, a false negative. The probability of making a type II error is termed beta. It is determined by both sample size and alpha

	Study accepts H_0	Study rejects H_0
Reality H_0		Type 1 error (alpha)
Reality H_1	Type 2 error (beta)	Power (1 - beta)

The power of a study is the probability of (correctly) rejecting the null hypothesis when it is false

- power = 1 - the probability of a type II error
- power can be increased by increasing the sample size

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 123 of 131



A case-control study is being designed to look at the relationship between epilepsy and a new vaccine for varicella. What is the usual outcome measure in a case-control study?



- A. Numbers needed to harm
- B. Odds ratio
- C. Experimental event rate
- D. Absolute risk increase
- E. Relative risk

Case-control studies - odds ratio

Question stats

A	1.3%
B	68.8%
C	3.1%
D	4%
E	22.8%

68.8% of users answered this question correctly

Session score = 6.5%

Study design

The following table highlights the main features of the main types of study:

Randomised controlled trial	<p>Participants randomly allocated to intervention or control group (e.g. standard treatment or placebo)</p> <ul style="list-style-type: none"> Practical or ethical problems may limit use
Cohort study	<p>Observational and prospective. Two (or more) are selected according to their exposure to a particular agent (e.g. medicine, toxin) and followed up to see how many develop a disease or other outcome.</p> <p>The usual outcome measure is the relative risk.</p> <ul style="list-style-type: none"> Examples include Framingham Heart Study
Case-control study	<p>Observational and retrospective. Patients with a particular condition (cases) are identified and matched with controls. Data is then collected on past exposure to a possible causal agent for the condition.</p> <p>The usual outcome measure is the odds ratio.</p> <ul style="list-style-type: none"> Inexpensive, produce quick results Useful for studying rare conditions Prone to confounding
Cross-sectional survey	<p>Provide a 'snapshot', sometimes called prevalence studies</p> <ul style="list-style-type: none"> Provide weak evidence of cause and effect

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 124 to 126 of 131



Theme: Screening test statistics

- A** Specificity
- B** Relative risk
- C** Absolute risk reduction
- D** Sensitivity
- E** Negative predictive value
- F** Odds ratio
- G** Likelihood ratio for a positive test result
- H** Positive predictive value
- I** Likelihood ratio for a negative test result
- J** Relative risk reduction

Please select the statistical term that each phrase describes:

- 124.** The chance that the patient does not have the condition if the diagnostic test is negative



Specificity

The correct answer is Negative predictive value

- 125.** Proportion of patients with the condition who have a positive test result



Specificity

The correct answer is Sensitivity

- 126.** How much the odds of the disease decrease when a test is negative



Specificity

The correct answer is Likelihood ratio for a negative test result

Question stats

Average score for registered users:

124		57.4%
125		65.7%
126		74.6%

Session score = 6.3%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Screening test statistics

It would be unusual for a medical exam not to feature a question based around

screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	TP / (TP + FN)	Proportion of patients with the condition who have a positive test result
Specificity	TN / (TN + FP)	Proportion of patients without the condition who have a negative test result
Positive predictive value	TP / (TP + FP)	The chance that the patient has the condition if the diagnostic test is positive
Negative predictive value	TN / (TN + FN)	The chance that the patient does not have the condition if the diagnostic test is negative
Likelihood ratio for a positive test result	sensitivity / (1 - specificity)	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	(1 - sensitivity) / specificity	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

Question 127 of 131



The average weight loss of a patient following a new type of bariatric surgery is 18 kg. The standard deviation of weight loss is 3kg. Assuming the weight loss is normally distributed, what percentage of patients will loss between 9 and 27 kg?

- A. 97.4%
- B. 95%
- C. 95.4%
- D. 68.3%
- E. 99.7%



99.7% of values of a normally distributed variable lie within 3 standard deviations of the mean.

Normal distribution

The normal distribution is also normal as Gaussian distribution or 'bell-shaped' distribution. It describes the spread of many biological and clinical measurements

Properties of the Normal distribution

- symmetrical i.e. mean = mode = median
- 68.3% of values lie within 1 SD of the mean
- 95.4% of values lie within 2 SD of the mean
- 99.7% of values lie within 3 SD of the mean
- this is often reversed, so that within 1.96 SD of the mean lie 95% of the sample values
- the range of the mean - (1.96 * SD) to the mean + (1.96 * SD) is called the 95% confidence interval, i.e. if a repeat sample of 100 observations are taken from the same group 95 of them would be expected to lie in that range

Standard deviation

- the standard deviation (SD) represents the average difference each observation in a sample lies from the sample mean
- SD = square root (variance)

Rate question:

Question stats

A	4.8%
B	1.9%
C	8.6%
D	7.9%
E	76.8%

76.8% of users answered this question correctly

Session score = 6.3%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Question 128 of 131



A contingency table is constructed for a new blood protein marker to screen for prostate cancer in men aged between 50 and 70 years:

	Prostate cancer present	Prostate cancer absent
New test positive	19	20
New test negative	14	723

What is the positive predictive value of the new test?

- A. 19/20
- B. 723/743
- C. 19/39
- D. 19/33
- E. 723/737



Question stats

A	2%
B	0.9%
C	89.3%
D	6.9%
E	1%

89.3% of users answered this question correctly

Session score = 6.3%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Positive predictive value = true positives / (true positives + false positives)

$$= 19 / (19 + 20)$$

Screening test statistics

It would be unusual for a medical exam not to feature a question based around screening test statistics. The available data should be used to construct a contingency table as below:

TP = true positive; FP = false positive; TN = true negative; FN = false negative

	Disease present	Disease absent
Test positive	TP	FP
Test negative	FN	TN

The table below lists the main statistical terms used in relation to screening tests:

Sensitivity	TP / (TP + FN)	Proportion of patients with the condition who have a positive test result
Specificity	TN / (TN + FP)	Proportion of patients without the condition who have a negative test result
Positive predictive value	TP / (TP + FP)	The chance that the patient has the condition if the diagnostic test is positive
Negative predictive	TN / (TN + FN)	The chance that the patient does not have the condition if the diagnostic test is negative

value	FN)	condition if the diagnostic test is negative
Likelihood ratio for a positive test result	sensitivity / (1 - specificity)	How much the odds of the disease increase when a test is positive
Likelihood ratio for a negative test result	(1 - sensitivity) / specificity	How much the odds of the disease decrease when a test is negative

Positive and negative predictive values are prevalence dependent. Likelihood ratios are not prevalence dependent

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 129 of 131



Which one of the following best describes the characteristics of a positively skewed distribution?

- A. Mode > mean > median
- B. Median > mean > mode
- C. Median > mode > mean
- D. Mean > median > mode
- E. Mean > mode > median



Skewed distributions

- alphabetical order: mean - median - mode
- '>' for positive, '<' for negative

Question stats

A	5.9%
B	3.2%
C	3.7%
D	83.1%
E	4.1%

83.1% of users answered this question correctly

Session score = 6.2%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Skewed distributions

Normal distributions: mean = median = mode

Positively skewed distribution: mean > median > mode

Negatively skewed distribution mean < median < mode

To remember the above note how they are in alphabetical order, think positive going forward with '>', whilst negative going backwards '<'

Rate question:

Question 130 of 131



Which type of bias are case-control studies particularly prone to?



- A. Recall bias
- B. Omitted-variable bias
- C. Publication bias
- D. Expectation bias
- E. Work-up bias

Question stats

A	<div style="width: 52.6%;"></div>	52.6%
B	<div style="width: 25.5%;"></div>	25.5%
C	<div style="width: 5.4%;"></div>	5.4%
D	<div style="width: 9.3%;"></div>	9.3%
E	<div style="width: 7.3%;"></div>	7.3%

52.6% of users answered this question correctly

Session score = 6.2%

Bias

Bias describes the situation in a trial where one outcome is systematically favoured. A number of different types of bias are recognised:

Selection bias	Error in assigning individuals to groups leading to differences which may influence outcome. Subtypes include sampling bias where the subjects are not representative of the population. This may be due to volunteer bias . An example of volunteer bias would be a study looking at the prevalence of <i>Chlamydia</i> in the student population. Students who are at risk of <i>Chlamydia</i> may be more, or less, likely to participate in the study. A similar concept is non-responder bias . If a survey on dietary habits was sent out in the post to random households it is likely that the people who didn't respond would have poorer diets than those who did.
Publication bias	Failure to publish results from valid studies, often as they showed a negative or uninteresting result. Important in meta-analyses where studies showing negative results may be excluded.
Work-up bias (verification bias)	Mainly seen in studies trying to validate a new diagnostic test. Refers to the gold-standard diagnostic test being done more frequently in patients who have already had a positive new test.
Expectation bias	Only a problem in non-blinded trials. Observers may subconsciously measure or report data in a way that favours the expected study outcome.
Recall bias	A particular problem in case-control studies.

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Rate question:

Question 131 of 131



A new adjuvant treatment for women with breast cancer is investigated. The study looks at the recurrence rate after 5 years. The following data is obtained:

	Number of patients	Number who had a recurrence within a 5 year period
New drug	200	40
Placebo	400	100

What is the relative risk reduction?



- A. 50%
- B. 20%
- C. 4
- D. 0.8
- E. 5%

$$\text{Relative risk reduction} = (\text{EER} - \text{CER}) / \text{CER}$$

Experimental event rate, $\text{EER} = 40 / 200 = 0.2$

Control event rate, $\text{CER} = 100 / 400 = 0.25$

Relative risk reduction = $(\text{EER} - \text{CER}) / \text{CER} = (0.2 - 0.25) / 0.25 = -0.2$ or a 20% reduction

Relative risk

Relative risk (RR) is the ratio of risk in the experimental group (experimental event rate, EER) to risk in the control group (control event rate, CER)

To recap

- EER = rate at which events occur in the experimental group
- CER = rate at which events occur in the control group

For example, if we look at a trial comparing the use of paracetamol for dysmenorrhoea compared to placebo we may get the following results

	Total number of patients	Experienced significant pain relief
Paracetamol	100	60

Question stats

A	3.2%
B	52%
C	4.4%
D	15.6%
E	24.9%

52% of users answered this question correctly

Session score = 6.1%

RCGP curriculum

3.5 - Evidence-based Practice

[Curriculum statement](#)

Placebo	80	20
---------	----	----

Experimental event rate, $EER = 60 / 100 = 0.6$

Control event rate, $CER = 20 / 80 = 0.25$

Therefore the relative risk = $EER / CER = 0.6 / 0.25 = 2.4$

If the risk ratio is > 1 then the rate of an event (in this case experiencing significant pain relief) is increased compared to controls. It is therefore appropriate to calculate the relative risk increase if necessary (see below).

If the risk ratio is < 1 then the rate of an event is decreased compared to controls. The relative risk reduction should therefore be calculated (see below).

Relative risk reduction (RRR) or **relative risk increase (RRI)** is calculated by dividing the absolute risk change by the control event rate

Using the above data, $RRI = (EER - CER) / CER = (0.6 - 0.25) / 0.25 = 1.4 = 140\%$

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 1 of 60



A 56-year-old woman presents with facial asymmetry. Whilst brushing her teeth this morning she noted that the right hand corner of her mouth was drooping. She is generally well but noted some pain behind her right ear yesterday and says her right eye is becoming dry. On examination she has a complete paralysis of the facial nerve on the right side, extending from the forehead to the mouth. Ear, nose and throat examination is normal. Clinical examination of the peripheral nervous system is normal. What is the most likely diagnosis?



- A. Ramsey-Hunt syndrome
- B. **Bell's palsy**
- C. Stroke
- D. Multiple sclerosis
- E. Parotid tumour

Question stats

A	<div style="width: 18.6%;"></div>	18.6%
B	<div style="width: 78.4%;"></div>	78.4%
C	<div style="width: 1.4%;"></div>	1.4%
D	<div style="width: 0.2%;"></div>	0.2%
E	<div style="width: 1.4%;"></div>	1.4%

78.4% of users answered this question correctly

Session score = 100%

The pain around the ear raises the possibility of Ramsey-Hunt syndrome but this is actually quite common in Bell's palsy - some studies suggest it is seen in 50% of patients. The normal ear exam also goes against this diagnosis.

Bell's palsy

Bell's palsy may be defined as an acute, unilateral, idiopathic, facial nerve paralysis. The aetiology is unknown although the role of the herpes simplex virus has been investigated previously.

Features

- lower motor neuron facial nerve palsy - forehead affected*
- patients may also notice post-auricular pain (may precede paralysis), altered taste, dry eyes

Management

- in the past a variety of treatment options have been proposed including no treatment, prednisolone only and a combination of aciclovir and prednisolone
- following a National Institute for Health randomised controlled trial it is now recommended that prednisolone 25mg bd for 10 days should be prescribed for patients within 72 hours of onset of Bell's palsy. Adding in aciclovir gives no additional benefit
- eye care is important - prescription of artificial tears and eye lubricants should be considered

Prognosis

- if untreated around 15% of patients have permanent moderate to severe weakness

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

*upper motor neuron lesion 'spares' upper face

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 2 of 60



You review a 23-year-old woman who presents with a three week history of bilateral nasal obstruction, cough at night and a clear nasal discharge. She had similar symptoms around this time last year and the only history of note is asthma. What is the most likely diagnosis?



- A. Allergic rhinitis
- B. Chronic sinusitis
- C. Nasal hypertrophy secondary to the steroid inhaler
- D. Nasal polyps



- E. Vasomotor rhinitis

Question stats

A	<div style="width: 84.1%;"></div>	84.1%
B	<div style="width: 1.5%;"></div>	1.5%
C	<div style="width: 2.3%;"></div>	2.3%
D	<div style="width: 7.9%;"></div>	7.9%
E	<div style="width: 4.2%;"></div>	4.2%

84.1% of users answered this question correctly

Session score = 50%

Allergic rhinitis

Allergic rhinitis is an inflammatory disorder of the nose where the nose become sensitized to allergens such as house dust mites and grass, tree and weed pollens. It may be classified as follows, although the clinical usefulness of such classifications remains doubtful:

- seasonal: symptoms occur around the same time every year. Seasonal rhinitis which occurs secondary to pollens is known as hay fever
- perennial: symptoms occur throughout the year
- occupational: symptoms follow exposure to particular allergens within the work place

Features

- sneezing
- bilateral nasal obstruction
- clear nasal discharge
- post-nasal drip
- nasal pruritus

Management of allergic rhinitis

- allergen avoidance
- oral or intranasal antihistamines are first line
- intranasal corticosteroids
- course of oral corticosteroids are occasionally needed
- there may be a role for short courses of topical nasal decongestants (e.g. oxymetazoline). They should not be used for prolonged periods as increasing doses are required to achieve the same effect (tachyphylaxis) and rebound hypertrophy of the nasal mucosa may occur upon withdrawal

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Allergic rhinitis guidelines

Rate question:

Question 3 of 60 ✗



A 7-year-old girl is brought to surgery due to a sore throat. She has a temperature of 39.2°C and is not eating due to the pain, although she is tolerating fluids. The tonsils are covered in exudate bilaterally. Examination of the ears is unremarkable. Other than supportive treatment, what is the most appropriate management?

- A. Erythromycin for 10 days
- B. Amoxicillin for 7 days
- ✗ C. Antibiotics are not indicated
- ✓ D. Phenoxymethylpenicillin for 10 days
- E. Phenoxymethylpenicillin for 5 days

This girl has marked systemic upset and should be treated with antibiotics. A 7 or 10 day course of antibiotics is appropriate to ensure eradication of possible *Streptococcus* infection. Phenoxymethylpenicillin is the first-line antibiotic choice in the BNF

Sore throat

Sore throat encompasses pharyngitis, tonsillitis, laryngitis

Clinical Knowledge Summaries recommend:

- throat swabs and rapid antigen tests should not be carried out routinely in patients with a sore throat

Management

- paracetamol or ibuprofen for pain relief
- antibiotics are not routinely indicated

NICE indications for antibiotics

- features of marked systemic upset secondary to the acute sore throat
- unilateral peritonsillitis
- a history of rheumatic fever
- an increased risk from acute infection (such as a child with diabetes mellitus or immunodeficiency)
- patients with acute sore throat/acute pharyngitis/acute tonsillitis when 3 or more Centor criteria are present

The Centor criteria* are as follows:

- presence of tonsillar exudate
- tender anterior cervical lymphadenopathy or lymphadenitis
- history of fever

Question stats

A	1.1%
B	5.4%
C	6.1%
D	61.7%
E	25.7%

61.7% of users answered this question correctly

Session score = 33.3%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

- absence of cough

If antibiotics are indicated then either phenoxymethylpenicillin or erythromycin (if the patient is penicillin allergic) should be given. Either a 7 or 10 day course should be given

*if 3 or more of the criteria are present there is a 40-60% chance the sore throat is caused by Group A beta-haemolytic *Streptococcus*

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 4 of 60



A 14-year-old male presents to surgery with a 3 day history of a sore throat. Which one of the following features is not an indication for antibiotic therapy?



- A. Temperature of 39.1°C
- B. A past history of diabetes mellitus
- C. Two previous episodes in the past 5 months
- D. Unilateral peritonsillitis on examination
- E. A past history of rheumatic fever

A temperature of 39.1°C would indicate marked systemic upset

Sore throat

Sore throat encompasses pharyngitis, tonsillitis, laryngitis

Clinical Knowledge Summaries recommend:

- throat swabs and rapid antigen tests should not be carried out routinely in patients with a sore throat

Management

- paracetamol or ibuprofen for pain relief
- antibiotics are not routinely indicated

NICE indications for antibiotics

- features of marked systemic upset secondary to the acute sore throat
- unilateral peritonsillitis
- a history of rheumatic fever
- an increased risk from acute infection (such as a child with diabetes mellitus or immunodeficiency)
- patients with acute sore throat/acute pharyngitis/acute tonsillitis when 3 or more Centor criteria are present

The Centor criteria* are as follows:

- presence of tonsillar exudate
- tender anterior cervical lymphadenopathy or lymphadenitis
- history of fever
- absence of cough

If antibiotics are indicated then either phenoxymethylpenicillin or erythromycin (if the patient is penicillin allergic) should be given. Either a 7 or 10 day course should be given

Question stats

A		8.8%
B		13.6%
C		64.9%
D		5.4%
E		7.3%

64.9% of users answered this question correctly

Session score = 50%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

*if 3 or more of the criteria are present there is a 40-60% chance the sore throat is caused by Group A beta-haemolytic *Streptococcus*

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 5 of 60



A 40-year-old woman presents with recurrent episodes of vertigo associated with a feeling of 'fullness' and 'pressure' in her ears. She thinks her hearing is worse during these attacks. Clinical examination is unremarkable. What is the most likely diagnosis?



- A. **Meniere's disease**
- B. Benign paroxysmal positional vertigo
- C. Acoustic neuroma
- D. Cholesteatoma
- E. Somatisation

Question stats

A	<div style="width: 86.3%;"></div>	86.3%
B	<div style="width: 9%;"></div>	9%
C	<div style="width: 2.3%;"></div>	2.3%
D	<div style="width: 0.8%;"></div>	0.8%
E	<div style="width: 1.7%;"></div>	1.7%

86.3% of users answered this question correctly

Session score = 60%

Meniere's disease

Meniere's disease is a disorder of the inner ear of unknown cause. It is characterised by excessive pressure and progressive dilation of the endolymphatic system. It is more common in middle-aged adults but may be seen at any age. Meniere's disease has a similar prevalence in both men and women.

Features

- recurrent episodes of vertigo, tinnitus and hearing loss (sensorineural). Vertigo is usually the prominent symptom
- a sensation of aural fullness or pressure is now recognised as being common
- other features include nystagmus and a positive Romberg test
- episodes last minutes to hours
- typically symptoms are unilateral but bilateral symptoms may develop after a number of years

Natural history

- symptoms resolve in the majority of patients after 5-10 years
- some patients may be left with hearing loss
- psychological distress is common

Management

- ENT assessment is required to confirm the diagnosis
- patients should inform the DVLA. The current advice is to cease driving until satisfactory control of symptoms is achieved
- acute attacks: buccal or intramuscular prochlorperazine. Admission is sometimes required
- prevention: betahistine may be of benefit

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 6 of 60


A 3-year-old boy is brought to surgery. His mum reports that he has been complaining of a sore left ear for the past 2-3 weeks. This morning she noticed some 'green gunge' on his pillow. On examination his temperature is 37.8°C. Otoscopy of the right ear is normal. On the left side the tympanic membrane cannot be visualised as the ear canal is full with a yellow-green discharge. What is the most appropriate action?

- A. Review in 2 weeks
- B. Admit to paediatrics
- C. Advise olive oil drops followed by ear syringing
- D. Urgent referral to ENT
- E. **Amoxicillin + review in 2 weeks**


Question stats

A		7.2%
B		3.2%
C		0.7%
D		14.5%
E		74.5%

74.5% of users answered this question correctly

Session score = 66.7%

This boy is likely to have had an acute otitis media with perforation.

Perforated tympanic membrane

The most common cause of a perforated tympanic membrane is infection. Other causes include barotrauma or direct trauma.

A perforated tympanic membrane may lead to hearing loss depending on the size and also increase the risk of otitis media.

Management

- no treatment is needed in the majority of cases as the tympanic membrane will usually heal after 6-8 weeks. It is advisable to avoid getting water in the ear during this time
- it is common practice to prescribe antibiotics to perforations which occur following an episode of acute otitis media. NICE support this approach in the 2008 Respiratory tract infection guidelines
- myringoplasty may be performed if the tympanic membrane does not heal by itself

Rate question:
RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Question 7 of 60



A 34-year-old man is found to have impacted ear wax on the left-side. Which one of the following preparations is it least suitable to prescribe?

- ☒ A. Sodium bicarbonate 5%
- ☒ B. Docusate sodium 5%
- ☐ C. Almond oil
- ☐ D. Olive oil
- ☐ E. Sodium chloride 0.9%

Docusate sodium 5% is found in some proprietary preparations but is listed in the BNF as being less suitable for prescription.

Ear wax

Ear wax is a normal physiological substance which helps protect the ear canal. Impacted ear wax is extremely common and may cause a variety of symptoms including:

- pain
- loss of hearing
- tinnitus
- vertigo

The main treatment options in primary care are ear drops or irrigation ('ear syringing'). Treatment should not be given if a perforation is suspected. The following drops may be used:

- olive oil
- sodium bicarbonate 5%
- sodium chloride 0.9%
- almond oil

Rate question:

Question stats

A	10.3%
B	56%
C	6.3%
D	1.6%
E	25.9%

56% of users answered this question correctly

Session score = 57.1%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Ear wax guidelines

Questions 8 to 10 of 60



Theme: Deafness

- A** Acute suppurative otitis media
- B** Presbycusis
- C** Meniere's disease
- D** Drug ototoxicity
- E** Otitis externa
- F** Congenital rubella infection
- G** Acoustic neuroma
- H** Glue ear
- I** Otosclerosis
- J** Cholesteatoma

For each one of the following scenarios please select the most likely diagnosis:

8. A 36-year-old man presents with recurrent episodes of right-sided tinnitus, hearing loss and vertigo. These episodes typically last between 10-30 minutes. He also describes a 'full' sensation in his right ear. Otoscopy is unremarkable and the cranial nerve examination is normal.



Meniere's disease

Symptoms with an acoustic neuroma tend to be more progressive rather than episodic.

9. A 31-year-old man presents with bilateral hearing loss and tinnitus. There is a family history of similar problems. Examination of the tympanic membranes is unremarkable. Audiometry shows bilateral conductive hearing loss.



Otosclerosis

10. A 2-year-old boy is brought in by his mother due to concerns about his hearing and delayed speech. She has noticed problems for the past three months. You can see from the notes that he has had frequent courses of amoxicillin for otitis media in the past. There is no evidence of excessive ear wax on examination.



Glue ear

Question stats

Average score for registered users:

8	<div></div>	85.7%
9	<div></div>	77.1%
10	<div></div>	88.2%

Session score = 70%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Deafness

The most common causes of hearing loss are ear wax, otitis media and otitis externa. The table below details some of the characteristic features of other causes:

Presbycusis	<p>Presbycusis describes age-related sensorineural hearing loss. Patients may describe difficulty following conversations</p> <p>Audiometry shows bilateral high-frequency hearing loss</p>
Otosclerosis	<p>Autosomal dominant, replacement of normal bone by vascular spongy bone. Onset is usually at 20-40 years - features include:</p> <ul style="list-style-type: none"> • conductive deafness • tinnitus • tympanic membrane - 10% of patients may have a 'flamingo tinge', caused by hyperaemia • positive family history
Glue ear	<p>Also known as otitis media with effusion</p> <ul style="list-style-type: none"> • peaks at 2 years of age • hearing loss is usually the presenting feature (glue ear is the commonest cause of conductive hearing loss and elective surgery in childhood) • secondary problems such as speech and language delay, behavioural or balance problems may also be seen
Meniere's disease	<p>More common in middle-aged adults</p> <ul style="list-style-type: none"> • recurrent episodes of vertigo, tinnitus and hearing loss (sensorineural). Vertigo is usually the prominent symptom • a sensation of aural fullness or pressure is now recognised as being common • other features include nystagmus and a positive Romberg test • episodes last minutes to hours
Drug ototoxicity	<p>Examples include aminoglycosides (e.g. Gentamicin), furosemide, aspirin and a number of cytotoxic agents</p>
Noise damage	<p>Workers in heavy industry are particularly at risk</p> <p>Hearing loss is bilateral and typically is worse at frequencies of 3000–6000 Hz</p>
Acoustic neuroma	<p>Features can be predicted by the affected cranial nerves</p>

(more correctly called vestibular schwannomas)

- cranial nerve VIII: hearing loss, vertigo, tinnitus
- cranial nerve V: absent corneal reflex
- cranial nerve VII: facial palsy

Bilateral acoustic neuromas are seen in neurofibromatosis type 2

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 11 of 60


A 59-year-old man presents with a severe pain deep within his right ear. He feels dizzy and reports that the room 'is spinning'. Clinical examination shows a partial facial nerve palsy on the right side and vesicular lesions on the anterior two-thirds of his tongue. What is the most likely diagnosis?

- A. Meniere's disease
- B. Herpes zoster ophthalmicus
- ✓ C. **Ramsay Hunt syndrome**
- D. Acoustic neuroma
- E. Trigeminal neuralgia

Question stats

A		0.7%
B		7.6%
C		85.2%
D		5%
E		1.5%

85.2% of users answered this question correctly

Session score = 72.7%

Ramsay Hunt syndrome

Ramsay Hunt syndrome (herpes zoster oticus) is caused by the reactivation of the varicella zoster virus in the geniculate ganglion of the seventh cranial nerve.

Features

- auricular pain is often the first feature
- facial nerve palsy
- vesicular rash around the ear
- other features include vertigo and tinnitus

Management

- oral aciclovir and corticosteroids are usually given

Rate question:
RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Question 12 of 60



A 6-year-old boy is brought to surgery. His mother says he has been complaining of left sided otalgia for the past three days. Otoscopy demonstrates the following:



What is the most likely diagnosis?

- A. Acute otitis media with perforation
- B. Cholesteatoma
- C. Glue ear
- D. Normal tympanic membrane
- E. Acute otitis media



Question stats

A	4.9%
B	1.8%
C	15.5%
D	22.7%
E	55.1%

55.1% of users answered this question correctly

Session score = 75%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[NICE](#)

2008 Respiratory tract infection guidelines

Otitis media

Following the 2008 NICE guidelines on respiratory tract infections antibiotics are not routinely recommended. NICE recommends however that they should be considered in the following situations:


- children younger than 2 years with bilateral acute otitis media
- children with otorrhoea who have acute otitis media

Rate question:

Question 13 of 60



A 37-year-old man presents with nasal obstruction and loud snoring. He has noticed these symptoms get gradually worse for the past two months. His left nostril feels blocked whilst his right feels clear and normal. There is no history of epistaxis and he is systemically well. On examination a large nasal polyp can be seen in the left nostril. What is the most appropriate action?

- A. Reassure + provide patient information leaflet on nasal polyps
- B. Enquire about cocaine use
-  C. **Refer to ENT**
- D. Trial of intranasal steroids
- E. Nasal cautery

Question stats

A	1.2%
B	0.3%
C	72.1%
D	25.9%
E	0.4%

72.1% of users answered this question correctly

Session score = 76.9%

Given that his symptoms are unilateral it is important he is referred to ENT for a full examination.

Nasal polyps

Around in 1% of adults in the UK have nasal polyps. They are around 2-4 times more common in men and are not commonly seen in children or the elderly.

Associations

- asthma* (particularly late-onset asthma)
- aspirin sensitivity*
- infective sinusitis
- cystic fibrosis
- Kartagener's syndrome
- Churg-Strauss syndrome

Features

- nasal obstruction
- rhinorrhoea, sneezing
- poor sense of taste and smell

Unusual features which always require further investigation include unilateral symptoms or bleeding.

Management

- all patients with suspected nasal polyps should be referred to ENT for a full examination
- topical corticosteroids shrink polyp size in around 80% of patients

*the association of asthma, aspirin sensitivity and nasal polyposis is known as Samter's triad

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 14 of 60


A 45-year-old man presents with dizziness and right-sided hearing loss to his GP. Which one of the following tests would most likely indicate an acoustic neuroma?

- A. Jerky nystagmus
- B. Left homonymous hemianopia
- C. Tongue deviated to the left
- D. Fasciculation of the tongue
- E. Absent corneal reflex



Loss of corneal reflex - think acoustic neuroma

Question stats

A		15.2%
B		5.5%
C		6.2%
D		4.4%
E		68.7%

68.7% of users answered this question correctly

Session score = 78.6%

Acoustic neuroma

Acoustic neuromas (more correctly called vestibular schwannomas) account for approximately five percent of intracranial tumours and 90 percent of cerebellopontine angle

Features can be predicted by the affected cranial nerves

- cranial nerve VIII: hearing loss, vertigo, tinnitus
- cranial nerve V: absent corneal reflex
- cranial nerve VII: facial palsy

Bilateral acoustic neuromas are seen in neurofibromatosis type 2

MRI of the cerebellopontine angle is the investigation of choice

Rate question:

RCGP curriculum

15.4 - ENT and Facial Problems



[Knowledge](#)

[Curriculum statement](#)

Question 15 of 60



A 21-year-old man presents with halitosis and mouth pain. Examination reveals very poor dental hygiene with bleeding gums and widespread gingival ulceration. He has a temperature of 38.0°C. You advise him to see a dentist. What other treatment options should be offered?

- A. Paracetamol + oral phenoxymethylpenicillin
- B. Paracetamol + oral phenoxymethylpenicillin + chlorhexidine mouthwash
-  C. Paracetamol + chlorhexidine mouthwash
-  D. Paracetamol + oral metronidazole + chlorhexidine mouthwash
- E. Paracetamol + oral metronidazole

This man has acute necrotizing ulcerative gingivitis with systemic upset. Treatment should be commenced whilst he is awaiting to see a dentist.

'Gingivitis and common dental problems' are listed in the curriculum under statement 15.4.

Gingivitis

Gingivitis is usually secondary to poor dental hygiene. Clinical presentation may range from simple gingivitis (painless, red swelling of the gum margin which bleeds on contact) to acute necrotizing ulcerative gingivitis (painful bleeding gums with halitosis and punched-out ulcers on the gums).

If a patient presents with acute necrotizing ulcerative gingivitis CKS recommend the following management:

- refer the patient to a dentist, meanwhile the following is recommended:
- oral metronidazole* for 3 days
- chlorhexidine (0.12% or 0.2%) or hydrogen peroxide 6% mouth wash
- simple analgesia

*the BNF also suggest that amoxicillin may be used

Rate question:

Question stats

A	1.1%
B	10.7%
C	10.1%
D	72.1%
E	5.9%

72.1% of users answered this question correctly

Session score = 73.3%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)
Gingivitis guidelines

Question 16 of 60



Which one of the following is least recognised in patients with Meniere's disease



- A. Aural fullness
- B. Symptoms triggered by sudden change in head position
- C. Sensorineural hearing loss
- D. Tinnitus
- E. Nystagmus

Question stats

A	2.8%
B	72%
C	7%
D	1%
E	17.3%

72% of users answered this question correctly

Session score = 75%

Meniere's disease

Meniere's disease is a disorder of the inner ear of unknown cause. It is characterised by excessive pressure and progressive dilation of the endolymphatic system. It is more common in middle-aged adults but may be seen at any age. Meniere's disease has a similar prevalence in both men and women.

Features

- recurrent episodes of vertigo, tinnitus and hearing loss (sensorineural). Vertigo is usually the prominent symptom
- a sensation of aural fullness or pressure is now recognised as being common
- other features include nystagmus and a positive Romberg test
- episodes last minutes to hours
- typically symptoms are unilateral but bilateral symptoms may develop after a number of years

Natural history

- symptoms resolve in the majority of patients after 5-10 years
- some patients may be left with hearing loss
- psychological distress is common

Management

- ENT assessment is required to confirm the diagnosis
- patients should inform the DVLA. The current advice is to cease driving until satisfactory control of symptoms is achieved
- acute attacks: buccal or intramuscular prochlorperazine. Admission is sometimes required
- prevention: betahistine may be of benefit

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

Question 17 of 60



A 30-year-old man presents with sneezing, nasal blockage and a constant runny nose. Which one of the following does not have a role in the management of allergic rhinitis?



- A. Oral decongestants
- B. Oral corticosteroids
- C. Intranasal corticosteroids
- D. Oral antihistamines
- E. Intranasal antihistamines

Question stats

A	<div style="width: 51.2%;"></div>	51.2%
B	<div style="width: 33.3%;"></div>	33.3%
C	<div style="width: 1.8%;"></div>	1.8%
D	<div style="width: 1.2%;"></div>	1.2%
E	<div style="width: 12.5%;"></div>	12.5%

51.2% of users answered this question correctly

Session score = 76.5%

Allergic rhinitis

Allergic rhinitis is an inflammatory disorder of the nose where the nose become sensitized to allergens such as house dust mites and grass, tree and weed pollens. It may be classified as follows, although the clinical usefulness of such classifications remains doubtful:

- seasonal: symptoms occur around the same time every year. Seasonal rhinitis which occurs secondary to pollens is known as hay fever
- perennial: symptoms occur throughout the year
- occupational: symptoms follow exposure to particular allergens within the work place

Features

- sneezing
- bilateral nasal obstruction
- clear nasal discharge
- post-nasal drip
- nasal pruritus

Management of allergic rhinitis

- allergen avoidance
- oral or intranasal antihistamines are first line
- intranasal corticosteroids
- course of oral corticosteroids are occasionally needed
- there may be a role for short courses of topical nasal decongestants (e.g. oxymetazoline). They should not be used for prolonged periods as increasing doses are required to achieve the same effect (tachyphylaxis) and rebound hypertrophy of the nasal mucosa may occur upon withdrawal

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Allergic rhinitis guidelines

Rate question:

Questions 18 to 20 of 60



Theme: Neck lumps

- A** Lymphoma
- B** Tuberculosis
- C** Reactive lymph nodes
- D** Cystic hygroma
- E** Branchial cyst
- F** Goitre
- G** Carotid aneurysm
- H** Pharyngeal pouch
- I** Thyroglossal cyst
- J** Cervical rib

For each one of the following scenarios select the most likely diagnosis

- 18.** A 75-year-old man presents with dysphagia and halitosis. On the left side of the neck is a small, fluctuant swelling which gurgles when palpated.



Pharyngeal pouch

- 19.** A 44-year-old woman presents with a neck swelling. She is systemically well. On examination she is noted to have a midline, non-tender neck swelling which moves upwards when she swallows.



Goitre

Patients with a goitre are often euthyroid. A thyroglossal cyst would be unusual at this age.

- 20.** A newborn baby is noted to have a large swelling on the left-side of the neck. On examination a soft, fluctuant and highly transilluminable lump is noted just beneath the skin.



Cystic hygroma

Question stats

Average score for registered users:

18	<div style="width: 88.9%;"></div>	88.9%
19	<div style="width: 52.2%;"></div>	52.2%
20	<div style="width: 70.3%;"></div>	70.3%

Session score = 80%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Neck lumps

The table below gives characteristic exam question features for conditions causing neck lumps:

Reactive lymphadenopathy	By far the most common cause of neck swellings. There may be a history of local infection or a generalised viral illness
Lymphoma	Rubbery, painless lymphadenopathy The phenomenon of pain whilst drinking alcohol is very uncommon There may be associated night sweats and splenomegaly
Thyroid swelling	May be hypo-, eu- or hyperthyroid symptomatically Moves upwards on swallowing
Thyroglossal cyst	More common in patients < 20 years old Usually midline, between the isthmus of the thyroid and the hyoid bone Moves upwards with protrusion of the tongue May be painful if infected
Pharyngeal pouch	More common in older men Represents a posteromedial herniation between thyropharyngeus and cricopharyngeus muscles Usually not seen but if large then a midline lump in the neck that gurgles on palpation Typical symptoms are dysphagia, regurgitation, aspiration and chronic cough
Cystic hygroma	A congenital lymphatic lesion (lymphangioma) typically found in the neck, classically on the left side Most are evident at birth, around 90% present before 2 years of age
Branchial cyst	An oval, mobile cystic mass that develops between the sternocleidomastoid muscle and the pharynx Develop due to failure of obliteration of the second branchial cleft in embryonic development Usually present in early adulthood
Cervical rib	More common in adult females Around 10% develop thoracic outlet syndrome
Carotid aneurysm	Pulsatile lateral neck mass which doesn't move on swallowing

Rate question:

Question 21 of 60


Which one of the following medications is most useful for helping to prevent attacks of Meniere's disease?

- A. Promethazine
- B. Prochlorperazine
- C. **Betahistine**
- D. Chlorphenamine
- E. Cinnarizine


Question stats

A		4%
B		15.8%
C		74.3%
D		1.3%
E		4.5%

74.3% of users answered this question correctly

Session score = 81%

Meniere's disease

Meniere's disease is a disorder of the inner ear of unknown cause. It is characterised by excessive pressure and progressive dilation of the endolymphatic system. It is more common in middle-aged adults but may be seen at any age. Meniere's disease has a similar prevalence in both men and women.

Features

- recurrent episodes of vertigo, tinnitus and hearing loss (sensorineural). Vertigo is usually the prominent symptom
- a sensation of aural fullness or pressure is now recognised as being common
- other features include nystagmus and a positive Romberg test
- episodes last minutes to hours
- typically symptoms are unilateral but bilateral symptoms may develop after a number of years

Natural history

- symptoms resolve in the majority of patients after 5-10 years
- some patients may be left with hearing loss
- psychological distress is common

Management

- ENT assessment is required to confirm the diagnosis
- patients should inform the DVLA. The current advice is to cease driving until satisfactory control of symptoms is achieved
- acute attacks: buccal or intramuscular prochlorperazine. Admission is sometimes required
- prevention: betahistine may be of benefit

RCGP curriculum

15.4 - ENT and Facial Problems



[Knowledge](#)

[Curriculum statement](#)






Rate question:

Question 22 of 60


A 52-year-old woman presents to surgery with a two week history of dizziness when she rolls over in bed. She says it feels like the room is spinning around her. Examination of her ears and cranial nerves is unremarkable. Given the likely diagnosis of benign paroxysmal positional vertigo what is the most appropriate management?

- A. Trial of prochlorperazine
- B. Request MRI brain
- C. Advise review by an optician
-  D. **Perform Epley manoeuvre**
-  E. Trial of cinnarizine

Question stats

A		23.8%
B		0.6%
C		0.2%
D		68.9%
E		6.5%

68.9% of users answered this question correctly

Session score = 77.3%

The majority of GPs would probably not feel confident performing this manoeuvre and may refer the patient to ENT

Benign paroxysmal positional vertigo

Benign paroxysmal positional vertigo (BPPV) is one of the most common causes of vertigo encountered. It is characterised by the sudden onset of dizziness and vertigo triggered by changes in head position

Features

- vertigo triggered by change in head position (e.g. rolling over in bed or gazing upwards)
- may be associated with nausea
- each episode typically lasts 10-20 seconds
- positive Halpike manoeuvre

BPPV has a good prognosis and usually resolves spontaneously after a few weeks to months. Symptomatic relief may be gained by:

- Epley manoeuvre (successful in around 80% of cases)
- teaching the patient exercises they can do themselves at home, for example Brandt-Daroff exercises

Medication is often prescribed (e.g. Betahistine) but it tends to be of limited value

Rate question:
RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Benign paroxysmal positional vertigo guidelines

Question 23 of 60


Which one of the following features is least consistent with a diagnosis of otosclerosis?

- A. Tinnitus
- B. Positive family history
- C. Normal tympanic membrane
- D. Conductive deafness
- E. Onset after the age of 50 years


Question stats

A		16.1%
B		2.3%
C		13.1%
D		6.6%
E		61.9%

61.9% of users answered this question correctly

Session score = 78.3%

Otosclerosis

Otosclerosis describes the replacement of normal bone by vascular spongy bone. It causes a progressive conductive deafness due to fixation of the stapes at the oval window. Otosclerosis is autosomal dominant and typically affects young adults

Onset is usually at 20-40 years - features include:

- conductive deafness
- tinnitus
- normal tympanic membrane*
- positive family history

Management

- hearing aid
- stapedectomy

*10% of patients may have a 'flamingo tinge', caused by hyperaemia

Rate question:
RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Question 24 of 60

A 25-year-old woman presents as she has noticed an unusual appearance of her tongue. This has been present for the past few weeks. She reports getting a burning sensation when she eats spicy food.


Question stats

A	1.5%
B	56.3%
C	9.7%
D	25.4%
E	7.1%

56.3% of users answered this question correctly

Session score = 79.2%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

What is the most likely diagnosis?



- Strawberry tongue
- Geographic tongue**
- Hairy leukoplakia
- Oral *Candida*
- Glossitis likely secondary to anaemia

Geographic tongue

Geographic tongue is a benign, chronic condition of unknown cause. It is present in around 1-3% of the population and is more common in females.

Features

- erythematous areas with a white-grey border (the irregular, smooth red

- areas are said to look like the outline of a map)
- some patients report burning after eating certain food

Management

- reassurance about benign nature

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 25 of 60



A 54-year-old woman with a history of hypertension presents to surgery. She has a 4 week history of hoarseness which followed an upper respiratory tract infection 6 weeks ago. She is otherwise fit and well and is a non-smoker. What is the most appropriate management?



- A. Urgent chest x-ray
- B. Check full blood count
- C. Routine referral to ear, nose and throat
- D. Reassure
- E. Suggest chlorhexidine mouthwash

Question stats

A	<div style="width: 61.7%;"></div>	61.7%
B	<div style="width: 3.1%;"></div>	3.1%
C	<div style="width: 20.4%;"></div>	20.4%
D	<div style="width: 13.8%;"></div>	13.8%
E	<div style="width: 1.1%;"></div>	1.1%

61.7% of users answered this question correctly

Session score = 80%

An urgent chest x-ray should be performed to direct fast-track referral

Hoarseness

Causes of hoarseness include:

- voice overuse
- smoking
- viral illness
- hypothyroidism
- gastro-oesophageal reflux
- laryngeal cancer
- lung cancer

NICE guidelines on referral for suspect cancer suggest:

- refer urgently for chest x-ray patients with hoarseness persisting for more than 3 weeks, particularly smokers aged older than 50 years and heavy drinkers
- if there is a positive finding on chest x-ray, refer urgently to a team specialising in the management of lung cancer
- if the chest x-ray is normal, refer urgently to a team specialising in head and neck cancer

Rate question:

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[NICE](#)

Suspect cancer referral guidelines

Question 26 of 60



A 61-year-old woman presents with bilateral tinnitus. She reports no change in her hearing or other ear-related symptoms. Ear and cranial nerve examination is unremarkable. Which medication is she most likely to have recently started?

- A. Ciprofloxacin
- B. Nifedipine
- C. Repaglinide
- D. Quinine
- E. Bendroflumethiazide



Question stats

A	11.6%
B	5.4%
C	2.4%
D	43%
E	37.6%

43% of users answered this question correctly

Session score = 80.8%

Tinnitus

Causes of tinnitus include:

Meniere's disease	Associated with hearing loss, vertigo, tinnitus and sensation of fullness or pressure in one or both ears
Otosclerosis	Onset is usually at 20-40 years Conductive deafness Tinnitus Normal tympanic membrane* Positive family history
Acoustic neuroma	Hearing loss, vertigo, tinnitus Absent corneal reflex is important sign Associated with neurofibromatosis type 2
Hearing loss	Causes include excessive loud noise and presbycusis
Drugs	Aspirin Aminoglycosides Loop diuretics Quinine

Other causes include

- impacted ear wax
- chronic suppurative otitis media

*10% of patients may have a 'flamingo tinge', caused by hyperaemia

Rate question:

RCGP curriculum

15.4 - ENT and Facial Problems


[Knowledge](#)

[Curriculum statement](#)

Question 27 of 60



A 68-year-old woman presents with a two month history of electric shock like pains on the right side of her face. She describes having around 10-20 episodes a day which, each lasting for around 30-60 seconds. A recent dental check was normal. Neurological examination is unremarkable. What is the most suitable first-line management?

- A. Amitriptyline
- B. Sodium valproate
-  C. Carbamazepine
- D. Atenolol
- E. Zolmitriptan

Trigeminal neuralgia - carbamazepine is first-line

Trigeminal neuralgia

Trigeminal neuralgia is a pain syndrome characterised by severe unilateral pain. The vast majority of cases are idiopathic but compression of the trigeminal roots by tumours or vascular problems may occur

The International Headache Society defines trigeminal neuralgia as:






- a unilateral disorder characterised by brief electric shock-like pains, abrupt in onset and termination, limited to one or more divisions of the trigeminal nerve
- the pain is commonly evoked by light touch, including washing, shaving, smoking, talking, and brushing the teeth (trigger factors), and frequently occurs spontaneously
- small areas in the nasolabial fold or chin may be particularly susceptible to the precipitation of pain (trigger areas)
- the pains usually remit for variable periods

Management

- carbamazepine is first-line*
- failure to respond to treatment or atypical features (e.g. < 50 years old) should prompt referral to neurology

*the 2010 NICE neuropathic pain guidelines recommend using amitriptyline or pregabalin first-line for non-diabetic neuropathic pain., but makes no specific recommendation for trigeminal neuralgia. Due to the amount of evidence supporting carbamazepine in trigeminal neuralgia and its recommendation in

Question stats

A		40.5%
B		1.2%
C		56.7%
D		0.3%
E		1.3%

56.7% of users answered this question correctly

Session score = 81.5%

RCGP curriculum

15.7 - Neurological Problems

[Knowledge](#)

[Curriculum statement](#)

consensus guidelines (including Clinical Knowledge Summaries) the author does not feel that this recommendation should be changed for now

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 28 to 30 of 60



Theme: Vertigo

- A** Acoustic neuroma
- B** Viral labyrinthitis
- C** Meniere's disease
- D** Multiple sclerosis
- E** Vertebrobasilar ischaemia
- F** Ramsey-Hunt syndrome
- G** Benign paroxysmal positional vertigo

For each one of the following scenarios select the most likely diagnosis:

- 28.** A 62-year-old man with a 3 month history of dizziness when he rolls over in bed. Episodes last for about 20 seconds



Benign paroxysmal positional vertigo

- 29.** A 31-year-old female with a 3 week history of vertigo, right ear tinnitus and the sensation of fullness in her right ear



Meniere's disease

Acoustic neuroma is a differential and a MRI may be indicated

- 30.** A 33-year-old with coryzal symptoms presents with a one day history of vertigo and nausea. There is no hearing loss on examination



Viral labyrinthitis

Question stats

Average score for registered users:

28	<div style="width: 94.1%;"></div>	94.1%
29	<div style="width: 82.6%;"></div>	82.6%
30	<div style="width: 96.5%;"></div>	96.5%

Session score = 83.3%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Vertigo

The table below lists the main characteristics of the most important causes of vertigo

Viral labyrinthitis	<ul style="list-style-type: none"> Recent viral infection Sudden onset Nausea and vomiting Hearing may be affected
Vestibular neuritis	<ul style="list-style-type: none"> Recent viral infection Recurrent vertigo attacks lasting hours or days No hearing loss
Benign paroxysmal positional vertigo	<ul style="list-style-type: none"> Gradual onset Triggered by change in head position Each episode lasts 10-20 seconds
Meniere's disease	<ul style="list-style-type: none"> Associated with hearing loss, tinnitus and sensation of fullness or pressure in one or both ears
Vertebrobasilar ischaemia	<ul style="list-style-type: none"> Elderly patient Dizziness on extension of neck
Acoustic neuroma	<ul style="list-style-type: none"> Hearing loss, vertigo, tinnitus Absent corneal reflex is important sign Associated with neurofibromatosis type 2

Other causes of vertigo include

- trauma
- multiple sclerosis
- ototoxicity e.g. gentamicin

Rate question:

Question 31 of 60



A 34-year-old man complains of a sore throat. Which one of the following is not part of the Centor criteria used to assess the likelihood of a bacterial cause?

- A. Fever
- B. Tender anterior cervical lymphadenopathy
- C. Duration > 5 days
- D. Absence of cough
- E. Presence of tonsillar exudate



Question stats

A	4%
B	5.1%
C	71.4%
D	16.6%
E	2.8%

71.4% of users answered this question correctly

Session score = 83.9%

If 3 or more of the 4 Centor criteria are present there is a 40-60% chance the sore throat is caused by Group A beta-haemolytic *Streptococcus*

Respiratory tract infections: NICE guidelines

NICE issued guidance in 2008 on the management of respiratory tract infection, focusing on the prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care

A no antibiotic prescribing or delayed antibiotic prescribing approach is generally recommended for patients with acute otitis media, acute sore throat/acute pharyngitis/acute tonsillitis, common cold, acute rhinosinusitis or acute cough/acute bronchitis.

However, an immediate antibiotic prescribing approach may be considered for:

- children younger than 2 years with bilateral acute otitis media
- children with otorrhoea who have acute otitis media
- patients with acute sore throat/acute pharyngitis/acute tonsillitis when 3 or more Centor criteria are present

The Centor criteria* are as follows:

- presence of tonsillar exudate
- tender anterior cervical lymphadenopathy or lymphadenitis
- history of fever
- absence of cough

If the patient is deemed at risk of developing complications, an immediate antibiotic prescribing policy is recommended

- are systemically very unwell
- have symptoms and signs suggestive of serious illness and/or complications (particularly pneumonia, mastoiditis, peritonsillar abscess, peritonsillar cellulitis, intraorbital or intracranial complications)
- are at high risk of serious complications because of pre-existing comorbidity. This includes patients with significant heart, lung, renal, liver

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[NICE](#)

2008 Respiratory tract infection guidelines

or neuromuscular disease, immunosuppression, cystic fibrosis, and young children who were born prematurely

- are older than 65 years with acute cough and two or more of the following, or older than 80 years with acute cough and one or more of the following:
- - hospitalisation in previous year
- - type 1 or type 2 diabetes
- - history of congestive heart failure
- - current use of oral glucocorticoids

The guidelines also suggest that patients should be advised how long respiratory tract infections may last:

- acute otitis media: 4 days
- acute sore throat/acute pharyngitis/acute tonsillitis: 1 week
- common cold: 1 1/2 weeks
- acute rhinosinusitis: 2 1/2 weeks
- acute cough/acute bronchitis: 3 weeks

*if 3 or more of the criteria are present there is a 40-60% chance the sore throat is caused by Group A beta-haemolytic *Streptococcus*

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 32 of 60



A 24-year-old man who is suffering from sinusitis asks about using Sudafed (pseudoephedrine). Which one of the following medications would make the use of Sudafed contraindicated?

- A. Sodium valproate
- ✓ B. Monoamine oxidase inhibitor
- C. Salbutamol
- ✗ D. Triptan
- E. Selective serotonin reuptake inhibitor

A monoamine oxidase inhibitor combined with pseudoephedrine could potentially cause a hypertensive crisis.

The January 2010 AKT feedback report stated 'Increasingly, patients are encouraged to self-manage conditions, perhaps with advice from a pharmacist. Candidates did not perform well with regard to issues related to over the counter medication, such as side-effects and contraindications.'

Sinusitis

Sinusitis describes an inflammation of the mucous membranes of the paranasal sinuses. The sinuses are usually sterile - the most common infectious agents seen in acute sinusitis are *Streptococcus pneumoniae*, *Haemophilus influenzae* and rhinoviruses.

Predisposing factors include:

- nasal obstruction e.g. Septal deviation or nasal polyps
- recent local infection e.g. Rhinitis or dental extraction
- swimming/diving
- smoking

Features

- facial pain: typically frontal pressure pain which is worse on bending forward
- nasal discharge: usually thick and purulent
- nasal obstruction: e.g. 'mouth breathing'
- post-nasal drip: may produce chronic cough

Management of acute sinusitis

- analgesia
- intranasal decongestants
- oral antibiotics are not normally required but may be given for severe

Question stats

A	5.7%
B	55.6%
C	5.9%
D	25.8%
E	7%

55.6% of users answered this question correctly

Session score = 81.3%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)
Sinusitis

presentations. Amoxicillin is currently first-line

Management of recurrent or chronic sinusitis

- treat any acute element as above
- intranasal corticosteroids are often beneficial
- referral to ENT may be appropriate

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 33 of 60



Which one of the following patients is most likely to have nasal polyps?



- A. A 40-year-old man
- B. A 40-year-old woman
- C. An 8-year-old girl
- D. An 80-year-old woman
- E. An 8-year-old boy

Nasal polyps are most common in male adults

Question stats

A	<div style="width: 77.7%;"></div>	77.7%
B	<div style="width: 7.9%;"></div>	7.9%
C	<div style="width: 2.7%;"></div>	2.7%
D	<div style="width: 3.2%;"></div>	3.2%
E	<div style="width: 8.5%;"></div>	8.5%

77.7% of users answered this question correctly

Session score = 81.8%

Nasal polyps

Around in 1% of adults in the UK have nasal polyps. They are around 2-4 times more common in men and are not commonly seen in children or the elderly.

Associations

- asthma* (particularly late-onset asthma)
- aspirin sensitivity*
- infective sinusitis
- cystic fibrosis
- Kartagener's syndrome
- Churg-Strauss syndrome

Features

- nasal obstruction
- rhinorrhoea, sneezing
- poor sense of taste and smell

Unusual features which always require further investigation include unilateral symptoms or bleeding.

Management

- all patients with suspected nasal polyps should be referred to ENT for a full examination
- topical corticosteroids shrink polyp size in around 80% of patients

*the association of asthma, aspirin sensitivity and nasal polyposis is known as Samter's triad

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 34 of 60

You see a 3-year-old boy as a follow-up appointment. Two weeks ago he presented with left-sided otalgia associated with a purulent discharge. You prescribed amoxicillin and arranged to see him today. His mum reports that he is much better and says she has managed to keep the ear dry. On examination of the left side a perforation of the tympanic membrane is noted. What is the most appropriate action?

- ✓
- A. Advise to keep ear dry and see in a further 4 weeks time
 - B. Prescribe gentamicin ear drops to prevent infection + see in a further 6 weeks time
 - C. Advise to keep ear dry and see in a further 12 weeks time
 - D. Refer to ENT
 - E. Prescribe prophylactic dose amoxicillin to prevent infection + see in a further 4 weeks time

If there is still a perforation when the boy is reviewed in 4 weeks time (i.e. 6 weeks since the perforation occurred) then ENT referral should be considered. Topical gentamicin should never be given to a patient with a perforated tympanic membrane.

Perforated tympanic membrane

The most common cause of a perforated tympanic membrane is infection. Other causes include barotrauma or direct trauma.

A perforated tympanic membrane may lead to hearing loss depending on the size and also increase the risk of otitis media.

Management

- no treatment is needed in the majority of cases as the tympanic membrane will usually heal after 6-8 weeks. It is advisable to avoid getting water in the ear during this time
- it is common practice to prescribe antibiotics to perforations which occur following an episode of acute otitis media. NICE support this approach in the 2008 Respiratory tract infection guidelines
- myringoplasty may be performed if the tympanic membrane does not heal by itself

Rate question:

Question stats

A	<div></div>	74.8%
B	<div></div>	0.6%
C	<div></div>	14.5%
D	<div></div>	6.6%
E	<div></div>	3.5%

74.8% of users answered this question correctly

Session score = 82.4%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Question 35 of 60


A 60-year-old man is diagnosed with Bell's palsy. What is the current evidenced base approach to the management of this condition?

- A. Refer for urgent surgical decompression
- B. Aciclovir
- C. No treatment
- D. Aciclovir + prednisolone



E. **Prednisolone**

Eye care is also very important.

Bell's palsy

Bell's palsy may be defined as an acute, unilateral, idiopathic, facial nerve paralysis. The aetiology is unknown although the role of the herpes simplex virus has been investigated previously.

Features

- lower motor neuron facial nerve palsy - forehead affected*
- patients may also notice post-auricular pain (may precede paralysis), altered taste, dry eyes

Management

- in the past a variety of treatment options have been proposed including no treatment, prednisolone only and a combination of aciclovir and prednisolone
- following a National Institute for Health randomised controlled trial it is now recommended that prednisolone 25mg bd for 10 days should be prescribed for patients within 72 hours of onset of Bell's palsy. Adding in aciclovir gives no additional benefit
- eye care is important - prescription of artificial tears and eye lubricants should be considered

Prognosis

- if untreated around 15% of patients have permanent moderate to severe weakness

*upper motor neuron lesion 'saves' upper face

Rate question:

Question stats

A	0.3%
B	6.8%
C	5.8%
D	20.1%
E	67.1%

67.1% of users answered this question correctly

Session score = 82.9%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

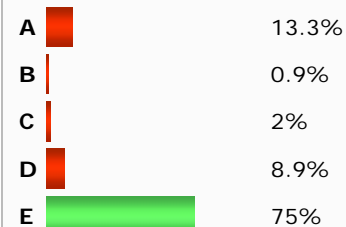
Question 36 of 60



Which one of the following is least recognised as a cause of vertigo?

- ☒ A. Gentamicin
☐ B. Meniere's disease
☐ C. Acoustic neuroma
☐ D. Multiple sclerosis
☒ E. Motor neuron disease

Question stats



75% of users answered this question correctly

Session score = 80.6%

Vertigo

The table below lists the main characteristics of the most important causes of vertigo

Viral labyrinthitis	<ul style="list-style-type: none"> Recent viral infection Sudden onset Nausea and vomiting Hearing may be affected
Vestibular neuritis	<ul style="list-style-type: none"> Recent viral infection Recurrent vertigo attacks lasting hours or days No hearing loss
Benign paroxysmal positional vertigo	<ul style="list-style-type: none"> Gradual onset Triggered by change in head position Each episode lasts 10-20 seconds
Meniere's disease	<ul style="list-style-type: none"> Associated with hearing loss, tinnitus and sensation of fullness or pressure in one or both ears
Vertebrobasilar ischaemia	<ul style="list-style-type: none"> Elderly patient Dizziness on extension of neck
Acoustic neuroma	<ul style="list-style-type: none"> Hearing loss, vertigo, tinnitus Absent corneal reflex is important sign Associated with neurofibromatosis type 2

Other causes of vertigo include

- trauma
- multiple sclerosis
- ototoxicity e.g. gentamicin

Rate question:

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Question 37 of 60



A 23-year-old man presents with a 4 day history of an itchy and sore right ear. He has recently returned from holiday in Spain. On examination the right ear canal is inflamed but no debris is seen. The tympanic membrane is clearly visible and is unremarkable. What is the most appropriate management?



A. **Topical corticosteroid + aminoglycoside**

B. Topical corticosteroid

C. Refer to ENT

D. Topical corticosteroid + clotrimazole



E. **Oral flucloxacillin**

This patient has otitis externa, which commonly develops after swimming on holiday. The first line management is either a topical antibiotic or a combined topical antibiotic and steroid.

Otitis externa

Otitis externa is a common reason for primary care attendance in the UK.

Causes of otitis externa include:

- infection: bacterial (*Staphylococcus aureus*, *Pseudomonas aeruginosa*) or fungal
- seborrhoeic dermatitis
- contact dermatitis (allergic and irritant)

Features

- ear pain, itch, discharge
- otoscopy: red, swollen, or eczematous canal

The recommend initial management of otitis externa is:

- topical antibiotic or a combined topical antibiotic with steroid
- if the tympanic membrane is perforated aminoglycosides should not be used
- if there is canal debris then consider removal
- if the canal is extensively swollen then an ear wick is sometimes inserted

Second line options include

- consider contact dermatitis secondary to neomycin
- oral antibiotics if the infection is spreading
- taking a swab inside the ear canal
- empirical use of an antifungal agent

Question stats

A		58.8%
B		21.6%
C		0.8%
D		11.4%
E		7.4%

58.8% of users answered this question correctly

Session score = 78.4%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Otitis externa guidelines

Malignant otitis externa is more common in elderly diabetics. In this condition there is extension of infection into the bony ear canal and the soft tissues deep to the bony canal. Intravenous antibiotics may be required.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 38 to 40 of 60



Theme: Deafness

- A** Parkinson's disease
- B** Presbycusis
- C** Meniere's disease
- D** Digoxin induced
- E** Noise damage
- F** Amiodarone induced
- G** Acoustic neuroma
- H** Furosemide induced
- I** Vestibular neuritis
- J** Cholesteatoma

Question stats

Average score for registered users:

38	<div style="width: 62.2%;"></div>	62.2%
39	<div style="width: 90.6%;"></div>	90.6%
40	<div style="width: 92.6%;"></div>	92.6%

Session score = 80%

For each one of the following scenarios please select the most likely diagnosis:

- 38.** A 61-year-old woman with a history of cardiac problems develops hearing loss after a prolonged admission in hospital. Drug toxicity is suspected.



Furosemide induced

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

- 39.** A 78-year-old man complains of difficulty following conversations. His wife says he has the TV turned up too loud. Audiometry shows sensorineural hearing loss at the higher frequencies.



Presbycusis

- 40.** A 37-year-old cello player complains of a three month history of vertigo and hearing loss on the left side. On examination he has an absent corneal reflex on the left eye.



Acoustic neuroma

Deafness

The most common causes of hearing loss are ear wax, otitis media and otitis externa. The table below details some of the characteristic features of other causes:

Presbycusis	<p>Presbycusis describes age-related sensorineural hearing loss. Patients may describe difficulty following conversations</p> <p>Audiometry shows bilateral high-frequency hearing loss</p>
Otosclerosis	<p>Autosomal dominant, replacement of normal bone by vascular spongy bone. Onset is usually at 20-40 years - features include:</p> <ul style="list-style-type: none"> • conductive deafness • tinnitus • tympanic membrane - 10% of patients may have a 'flamingo tinge', caused by hyperaemia • positive family history
Glue ear	<p>Also known as otitis media with effusion</p> <ul style="list-style-type: none"> • peaks at 2 years of age • hearing loss is usually the presenting feature (glue ear is the commonest cause of conductive hearing loss and elective surgery in childhood) • secondary problems such as speech and language delay, behavioural or balance problems may also be seen
Meniere's disease	<p>More common in middle-aged adults</p> <ul style="list-style-type: none"> • recurrent episodes of vertigo, tinnitus and hearing loss (sensorineural). Vertigo is usually the prominent symptom • a sensation of aural fullness or pressure is now recognised as being common • other features include nystagmus and a positive Romberg test • episodes last minutes to hours
Drug ototoxicity	<p>Examples include aminoglycosides (e.g. Gentamicin), furosemide, aspirin and a number of cytotoxic agents</p>
Noise damage	<p>Workers in heavy industry are particularly at risk</p> <p>Hearing loss is bilateral and typically is worse at frequencies of 3000–6000 Hz</p>
Acoustic neuroma (more correctly called vestibular schwannomas)	<p>Features can be predicted by the affected cranial nerves</p> <ul style="list-style-type: none"> • cranial nerve VIII: hearing loss, vertigo, tinnitus • cranial nerve V: absent corneal reflex • cranial nerve VII: facial palsy <p>Bilateral acoustic neuromas are seen in neurofibromatosis type 2</p>

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 41 of 60


A 41-year-old woman presents with a sore throat. Examination of the throat reveals:



What is the most likely diagnosis?

- A. Tonsillar carcinoma
- B. Peritonsillar abscess (quinsy)
- ✓ C. **Acute tonsillitis**
- D. Infectious mononucleosis
- E. Retropharyngeal abscess

Infectious mononucleosis is a possibility but a simple tonsillitis is the most likely diagnosis.

Tonsillitis and tonsillectomy

Complications of tonsillitis include:

- otitis media
- quinsy - peritonsillar abscess
- rheumatic fever and glomerulonephritis very rarely

The indications for tonsillectomy are controversial. NICE recommend that surgery should be considered only if the person meets all of the following criteria

- sore throats are due to tonsillitis (i.e. not recurrent upper respiratory tract

Question stats

A	0.8%
B	14.1%
C	80.9%
D	3.8%
E	0.4%

80.9% of users answered this question correctly

Session score = 80.5%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

infections)

- the person has five or more episodes of sore throat per year
- symptoms have been occurring for at least a year
- the episodes of sore throat are disabling and prevent normal functioning

Other established indications for a tonsillectomy include

- recurrent febrile convulsions secondary to episodes of tonsillitis
- obstructive sleep apnoea, stridor or dysphagia secondary to enlarged tonsils
- peritonsillar abscess (quinsy) if unresponsive to standard treatment

Complications of tonsillectomy

- primary (< 24 hours): haemorrhage in 2-3% (most commonly due to inadequate haemostasis), pain
- secondary (24 hours to 10 days): haemorrhage (most commonly due to infection), pain

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 42 of 60


A 71-year-old man presents with two year history of intermittent problems with swallowing. His wife has also noticed he has halitosis and is coughing at night. He has a past medical history of type 2 diabetes mellitus but states he is otherwise well. Of note his weight is stable and he has a good appetite. Clinical examination is unremarkable. What is the most likely diagnosis?



A. Oesophageal cancer

B. Hiatus hernia



C. Pharyngeal pouch

D. Oesophageal candidiasis

E. Benign oesophageal stricture

Question stats

A	1.2%
B	5.6%
C	83.5%
D	6.3%
E	3.4%

83.5% of users answered this question correctly

Session score = 78.6%

Given the two year history and good health oesophageal cancer is much less likely

Pharyngeal pouch

A pharyngeal pouch is a posteromedial diverticulum through Killian's dehiscence. Killian's dehiscence is a triangular area in the wall of the pharynx between the thyropharyngeus and cricopharyngeus muscles. It is more common in older patients and is 5 times more common in men

Features

- dysphagia
- regurgitation
- aspiration
- neck swelling which gurgles on palpation
- halitosis

Rate question:
RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Question 43 of 60



A 34-year-old woman with recurrent vertigo is referred to ENT and diagnosed with Meniere's disease. What is the most appropriate advice with regards to the DVLA?

- A. Inform the DVLA, cannot drive for 4 weeks from diagnosis
- B. Inform the DVLA, no restriction
- C. Inform the DVLA, cannot drive for one week after each acute episode
- D. No need to inform the DVLA
- E. Inform the DVLA, cannot drive until satisfactory control of symptoms is achieved



Question stats

A	0.9%
B	3.2%
C	1.9%
D	8.3%
E	85.7%

85.7% of users answered this question correctly

Session score = 79.1%

Meniere's disease

Meniere's disease is a disorder of the inner ear of unknown cause. It is characterised by excessive pressure and progressive dilation of the endolymphatic system. It is more common in middle-aged adults but may be seen at any age. Meniere's disease has a similar prevalence in both men and women.

Features

- recurrent episodes of vertigo, tinnitus and hearing loss (sensorineural). Vertigo is usually the prominent symptom
- a sensation of aural fullness or pressure is now recognised as being common
- other features include nystagmus and a positive Romberg test
- episodes last minutes to hours
- typically symptoms are unilateral but bilateral symptoms may develop after a number of years

Natural history

- symptoms resolve in the majority of patients after 5-10 years
- some patients may be left with hearing loss
- psychological distress is common

Management

- ENT assessment is required to confirm the diagnosis
- patients should inform the DVLA. The current advice is to cease driving until satisfactory control of symptoms is achieved
- acute attacks: buccal or intramuscular prochlorperazine. Admission is sometimes required
- prevention: betahistine may be of benefit

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 44 of 60


A 44-year-old man asks for advice. He is due to go on a long bus journey but suffers from debilitating motion sickness. Which one of the following medications is most likely to prevent motion sickness?

- ✓ A. Cyclizine
- B. Chlorpromazine
- ✗ C. Metoclopramide
- D. Prochlorperazine
- E. Domperidone

Motion sickness - hyoscine > cyclizine > promethazine

Motion sickness

Motion sickness describes the nausea and vomiting which occurs when an apparent discrepancy exists between visually perceived movement and the vestibular systems sense of movement

Management

- the BNF recommends hyoscine (e.g. transdermal patch) as being the most effective treatment. Use is limited due to side-effects
- non-sedating antihistamines such as cyclizine or cinnarizine are recommended in preference to sedating preparation such as promethazine

Rate question:
Question stats

A	<div></div>	33.4%
B	<div></div>	10.4%
C	<div></div>	3.4%
D	<div></div>	48.9%
E	<div></div>	4%

33.4% of users answered this question correctly

Session score = 77.3%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Question 45 of 60


A 25-year-old rugby player presents the day following a match. His right ear is significantly swollen and red. On examination he appears to have an auricular haematoma. What is the most appropriate management?

- A. Take a two-week course of ibuprofen
- B. Apply a compression bandage
- C. Apply an ice-pack six times a day for the next three days
- D. Perform a needle aspiration in surgery
- E. Refer to secondary care



Auricular haematomas are specifically mentioned in the RCGP curriculum.

Auricular haematomas

Auricular haematomas are common in rugby players and wrestlers. Prompt treatment is important to avoid the formation of 'cauliflower ear'.

Management

- incision and drainage has been shown to be superior to needle aspiration

Rate question:
Question stats

A	2%
B	6.4%
C	5%
D	14.6%
E	72.1%

72.1% of users answered this question correctly

Session score = 75.6%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Question 46 of 60



Which one of the following statements regarding Meniere's disease is correct?

- A. More common in patients from the Indian Subcontinent
- B. Symptoms resolve in the majority of patients after 6-12 months
- C. It is very rare that patients develop permanent hearing loss
- D. More common in children
- E. Approximately equal incidence in males and females



Question stats

A	3.2%
B	15.9%
C	24.7%
D	2.5%
E	53.7%

53.7% of users answered this question correctly

Session score = 76.1%

Meniere's disease

Meniere's disease is a disorder of the inner ear of unknown cause. It is characterised by excessive pressure and progressive dilation of the endolymphatic system. It is more common in middle-aged adults but may be seen at any age. Meniere's disease has a similar prevalence in both men and women.

Features

- recurrent episodes of vertigo, tinnitus and hearing loss (sensorineural). Vertigo is usually the prominent symptom
- a sensation of aural fullness or pressure is now recognised as being common
- other features include nystagmus and a positive Romberg test
- episodes last minutes to hours
- typically symptoms are unilateral but bilateral symptoms may develop after a number of years

Natural history

- symptoms resolve in the majority of patients after 5-10 years
- some patients may be left with hearing loss
- psychological distress is common

Management

- ENT assessment is required to confirm the diagnosis
- patients should inform the DVLA. The current advice is to cease driving until satisfactory control of symptoms is achieved
- acute attacks: buccal or intramuscular prochlorperazine. Admission is sometimes required
- prevention: betahistine may be of benefit

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Rate question:

Question 47 of 60



You review a 25-year-old man who has allergic rhinitis. He has been using intranasal oxymetazoline which he bought from the local chemist for the past 10 days. What is the main side-effect of using topical decongestants for prolonged periods?

- A. Permanent loss of smell
- B. Infective sinusitis
- C. Post-nasal drip
- D. Tachyphylaxis
- E. Necrosis of the nasal septum



Question stats

A	6.6%
B	1.3%
C	5.6%
D	71.6%
E	14.9%

71.6% of users answered this question correctly

Session score = 74.5%

After using topical decongestants for prolonged periods increasing doses are needed to provide the same effect, a phenomenon known as tachyphylaxis.

The January 2010 AKT feedback report stated 'Increasingly, patients are encouraged to self-manage conditions, perhaps with advice from a pharmacist. Candidates did not perform well with regard to issues related to over the counter medication, such as side-effects and contraindications.'

Allergic rhinitis

Allergic rhinitis is an inflammatory disorder of the nose where the nose become sensitized to allergens such as house dust mites and grass, tree and weed pollens. It may be classified as follows, although the clinical usefulness of such classifications remains doubtful:

- seasonal: symptoms occur around the same time every year. Seasonal rhinitis which occurs secondary to pollens is known as hay fever
- perennial: symptoms occur throughout the year
- occupational: symptoms follow exposure to particular allergens within the work place

Features

- sneezing
- bilateral nasal obstruction
- clear nasal discharge
- post-nasal drip
- nasal pruritus

Management of allergic rhinitis

- allergen avoidance
- oral or intranasal antihistamines are first line
- intranasal corticosteroids

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)
Allergic rhinitis guidelines

- course of oral corticosteroids are occasionally needed
- there may be a role for short courses of topical nasal decongestants (e.g. oxymetazoline). They should not be used for prolonged periods as increasing doses are required to achieve the same effect (tachyphylaxis) and rebound hypertrophy of the nasal mucosa may occur upon withdrawal

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 48 to 50 of 60



Theme: Neck lumps

- A** Lymphoma
- B** Tuberculosis
- C** Reactive lymph nodes
- D** Cystic hygroma
- E** Branchial cyst
- F** Goitre
- G** Carotid aneurysm
- H** Pharyngeal pouch
- I** Thyroglossal cyst
- J** Cervical rib

Question stats

Average score for registered users:

48	<div style="width: 45.3%;"></div>	45.3%
49	<div style="width: 40.2%;"></div>	40.2%
50	<div style="width: 87.9%;"></div>	87.9%

Session score = 76%

For each one of the following scenarios select the most likely diagnosis

- 48.** A 19-year-old man presents with a swelling on the left side of his neck. He has recently had an upper respiratory tract infection. On examination he has a smooth swelling in between the sternocleidomastoid muscle and the pharynx. It is fluctuant but doesn't transilluminate or move during swallowing.



Branchial cyst

Branchial cysts often present during intercurrent upper respiratory tract infection

- 49.** A 28-year-old Bangladeshi woman presents with a three day history of sweats, headache, lethargy and muscle aches. On examination she has bilateral tender swellings in the submandibular region.



Reactive lymph nodes

This patient probably has the 'flu

- 50.** A 17-year-old girl presents with a painless swelling in the neck. She is currently well. A midline, cystic swelling is noted in the region of the hyoid bone. It moves upwards when she swallows or sticks her tongue out.



Thyroglossal cyst

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Neck lumps

The table below gives characteristic exam question features for conditions causing neck lumps:

Reactive lymphadenopathy	By far the most common cause of neck swellings. There may be a history of local infection or a generalised viral illness
Lymphoma	Rubbery, painless lymphadenopathy The phenomenon of pain whilst drinking alcohol is very uncommon There may be associated night sweats and splenomegaly
Thyroid swelling	May be hypo-, eu- or hyperthyroid symptomatically Moves upwards on swallowing
Thyroglossal cyst	More common in patients < 20 years old Usually midline, between the isthmus of the thyroid and the hyoid bone Moves upwards with protrusion of the tongue May be painful if infected
Pharyngeal pouch	More common in older men Represents a posteromedial herniation between thyropharyngeus and cricopharyngeus muscles Usually not seen but if large then a midline lump in the neck that gurgles on palpation Typical symptoms are dysphagia, regurgitation, aspiration and chronic cough
Cystic hygroma	A congenital lymphatic lesion (lymphangioma) typically found in the neck, classically on the left side Most are evident at birth, around 90% present before 2 years of age
Branchial cyst	An oval, mobile cystic mass that develops between the sternocleidomastoid muscle and the pharynx Develop due to failure of obliteration of the second branchial cleft in embryonic development Usually present in early adulthood
Cervical rib	More common in adult females Around 10% develop thoracic outlet syndrome
Carotid aneurysm	Pulsatile lateral neck mass which doesn't move on swallowing

Rate question:

Question 51 of 60


Which one of the following conditions is least associated with nasal polyps?

- ✓ A. **Wegener's granulomatosis**
- B. Kartagener's syndrome
- C. Asthma
- ✗ D. **Infective sinusitis**
- E. Cystic fibrosis

Question stats

A	<div style="width: 53.3%;"></div>	53.3%
B	<div style="width: 12.6%;"></div>	12.6%
C	<div style="width: 8.8%;"></div>	8.8%
D	<div style="width: 16.9%;"></div>	16.9%
E	<div style="width: 8.4%;"></div>	8.4%

53.3% of users answered this question correctly

Session score = 74.5%

Nasal polyps

Around in 1% of adults in the UK have nasal polyps. They are around 2-4 times more common in men and are not commonly seen in children or the elderly.

Associations

- asthma* (particularly late-onset asthma)
- aspirin sensitivity*
- infective sinusitis
- cystic fibrosis
- Kartagener's syndrome
- Churg-Strauss syndrome

Features

- nasal obstruction
- rhinorrhoea, sneezing
- poor sense of taste and smell

Unusual features which always require further investigation include unilateral symptoms or bleeding.

Management

- all patients with suspected nasal polyps should be referred to ENT for a full examination
- topical corticosteroids shrink polyp size in around 80% of patients

*the association of asthma, aspirin sensitivity and nasal polyposis is known as Samter's triad

Rate question:
RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Question 52 of 60



Which one of the following statements regarding trigeminal neuralgia is correct?



- A. Duloxetine is the first-line treatment
- B. All patients with suspected trigeminal neuralgia should be referred to secondary care
- C. The pain is commonly triggered by touching the skin
- D. The pain is usually constant
- E. It is bilateral in 30% of cases

The pain is often triggered by light touch, shaving, eating etc. Only around 10% of cases are bilateral.

Trigeminal neuralgia

Trigeminal neuralgia is a pain syndrome characterised by severe unilateral pain. The vast majority of cases are idiopathic but compression of the trigeminal roots by tumours or vascular problems may occur

The International Headache Society defines trigeminal neuralgia as:

- a unilateral disorder characterised by brief electric shock-like pains, abrupt in onset and termination, limited to one or more divisions of the trigeminal nerve
- the pain is commonly evoked by light touch, including washing, shaving, smoking, talking, and brushing the teeth (trigger factors), and frequently occurs spontaneously
- small areas in the nasolabial fold or chin may be particularly susceptible to the precipitation of pain (trigger areas)
- the pains usually remit for variable periods

Management

- carbamazepine is first-line*
- failure to respond to treatment or atypical features (e.g. < 50 years old) should prompt referral to neurology

*the 2010 NICE neuropathic pain guidelines recommend using amitriptyline or pregabalin first-line for non-diabetic neuropathic pain., but makes no specific recommendation for trigeminal neuralgia. Due to the amount of evidence supporting carbamazepine in trigeminal neuralgia and its recommendation in consensus guidelines (including Clinical Knowledge Summaries) the author does not feel that this recommendation should be changed for now

Rate question:

Question stats

A	3%
B	4%
C	85.8%
D	1.8%
E	5.5%

85.8% of users answered this question correctly

Session score = 75%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Question 53 of 60


This 21-year-old woman has a history of recurrent epistaxis:



Image used on license from [DermNet NZ](#)

What is the most likely underlying diagnosis?

- A. Idiopathic thrombocytopenic purpura
- B. Peutz-Jeghers syndrome
- C. Anorexia nervosa
- D. Combined oral contraceptive pill use
- ✓ E. **Hereditary haemorrhagic telangiectasia**

Hereditary haemorrhagic telangiectasia

Also known as Osler-Weber-Rendu syndrome, hereditary haemorrhagic telangiectasia (HHT) is an autosomal dominant condition characterised by (as the name suggests) multiple telangiectasia over the skin and mucous membranes. Twenty percent of cases occur spontaneously without prior family history.

There are 4 main diagnostic criteria. If the patient has 2 then they are said to have a possible diagnosis of HHT. If they meet 3 or more of the criteria they are said to have a definite diagnosis of HHT:

- epistaxis : spontaneous, recurrent nosebleeds
- telangiectases: multiple at characteristic sites (lips, oral cavity, fingers, nose)

Question stats

A	13.3%
B	17.3%
C	0.5%
D	0.9%
E	68.1%

68.1% of users answered this question correctly

Session score = 75.5%

RCGP curriculum

15.10 - Skin Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DermNet NZ](#)

Hereditary haemorrhagic telangiectasia

[Postgraduate Medical Journal](#)

Review of HHT

- visceral lesions: for example gastrointestinal telangiectasia (with or without bleeding), pulmonary arteriovenous malformations (AVM), hepatic AVM, cerebral AVM, spinal AVM
- family history: a first-degree relative with HHT

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 54 of 60

A patient presents due to a 'brown coating' on his tongue. He is 34-years-old and has no significant medical history. The coating has been present for the past few weeks. He is asymptomatic other than a slight 'tickling' sensation on his tongue.



What is the most likely diagnosis?

- A. Lichen Planus
- B. Oral *Candida*
- C. Iron-deficiency anaemia
- D. Hairy leukoplakia
- E. **Black hairy tongue**


Question stats

A	2%
B	1.4%
C	2.5%
D	27.7%
E	66.4%

66.4% of users answered this question correctly

Session score = 75.9%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Black hairy tongue

Black hairy tongue is relatively common condition which results from defective desquamation of the filiform papillae. Despite the name the tongue may be brown, green, pink or another colour.

Predisposing factors

- poor oral hygiene
- antibiotics
- head and neck radiation
- HIV
- intravenous drug use

The tongue should be swabbed to exclude *Candida*

Management

- tongue scraping
- topical antifungals if *Candida*

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 55 of 60


Which one of the following viruses is associated with nasopharyngeal carcinoma?

- A. Adenovirus
- B. Rhinovirus
- C. Herpes simplex virus
- ✓ D. Epstein-Barr virus
- E. Picornavirus

EBV: associated malignancies:

- Burkitt's lymphoma
- Hodgkin's lymphoma
- nasopharyngeal carcinoma

Epstein-Barr virus: associated conditions

Malignancies associated with EBV infection

- Burkitt's lymphoma*
- Hodgkin's lymphoma
- nasopharyngeal carcinoma
- HIV-associated central nervous system lymphomas

The non-malignant condition hairy leukoplakia is also associated with EBV infection.

*EBV is currently thought to be associated with both African and sporadic Burkitt's

Rate question:

Question stats

A		9.3%
B		4.4%
C		5.8%
D		69.4%
E		11.1%

69.4% of users answered this question correctly

Session score = 76.4%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Question 56 of 60



A 30-year-old man presents with facial pain and a 'heavy head' sensation after having a cold. A diagnosis of acute sinusitis is suspected. Which one of the following should be considered for symptomatic relief?



- A. Intranasal decongestants
- B. Intranasal corticosteroids
- C. Oral antihistamine
- D. Oral mucolytics
- E. Steam inhalation

Analgesia is also important. Please see the CKS guidelines for more information.

Sinusitis

Sinusitis describes an inflammation of the mucous membranes of the paranasal sinuses. The sinuses are usually sterile - the most common infectious agents seen in acute sinusitis are *Streptococcus pneumoniae*, *Haemophilus influenzae* and rhinoviruses.

Predisposing factors include:

- nasal obstruction e.g. Septal deviation or nasal polyps
- recent local infection e.g. Rhinitis or dental extraction
- swimming/diving
- smoking

Features

- facial pain: typically frontal pressure pain which is worse on bending forward
- nasal discharge: usually thick and purulent
- nasal obstruction: e.g. 'mouth breathing'
- post-nasal drip: may produce chronic cough

Management of acute sinusitis

- analgesia
- intranasal decongestants
- oral antibiotics are not normally required but may be given for severe presentations. Amoxicillin is currently first-line

Management of recurrent or chronic sinusitis

- treat any acute element as above
- intranasal corticosteroids are often beneficial
- referral to ENT may be appropriate

Question stats

A	<div style="width: 40.8%;"></div>	40.8%
B	<div style="width: 15.7%;"></div>	15.7%
C	<div style="width: 5.7%;"></div>	5.7%
D	<div style="width: 1%;"></div>	1%
E	<div style="width: 36.8%;"></div>	36.8%

40.8% of users answered this question correctly

Session score = 76.8%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[Clinical Knowledge Summaries](#)

Sinusitis

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 57 of 60


During a routine cranial nerve examination the following findings are observed:

Rinne's test: Air conduction > bone conduction in both ears

Weber's test: Localises to the right side

What do these tests imply?

- A. Left conductive deafness
- B. Normal hearing
- C. Right conductive deafness
- D. Right sensorineural deafness
- ✓ E. **Left sensorineural deafness**

In Weber's test if there is a sensorineural problem the sound is localised to the unaffected side (right) indicating a problem on the left side

Rinne's and Weber's test

Performing both Rinne's and Weber's test allows differentiation of conductive and sensorineural deafness.

Rinne's test

- tuning fork is placed over the mastoid process until the sound is no longer heard, followed by repositioning just over external acoustic meatus
- air conduction (AC) is normally better than bone conduction (BC)
- if BC > AC then conductive deafness

Weber's test

- tuning fork is placed in the middle of the forehead equidistant from the patient's ears
- the patient is then asked which side is loudest
- in unilateral sensorineural deafness, sound is localised to the unaffected side
- in unilateral conductive deafness, sound is localised to the affected side

Rate question:

Question stats

A	12.7%
B	1.4%
C	15.5%
D	17.9%
E	52.5%

52.5% of users answered this question correctly

Session score = 77.2%

RCGP curriculum

15.4 - ENT and Facial Problems

[Knowledge](#)

[Curriculum statement](#)

Questions 58 to 60 of 60



Theme: Facial pain

- A** Sinusitis
- B** Dental abscess
- C** Acute glaucoma
- D** Temporal arteritis
- E** Shingles
- F** Cluster headache
- G** Trigeminal neuralgia
- H** Atypical facial pain
- I** Temporomandibular joint dysfunction
- J** Parotitis

Question stats

Average score for registered users:

58	<div style="width: 84.1%;"></div>	84.1%
59	<div style="width: 93.9%;"></div>	93.9%
60	<div style="width: 76.3%;"></div>	76.3%

Session score = 76.7%

For each one of the following scenarios select the most likely diagnosis:

- 58.** A 64-year-old woman with a one week history of pain above and lateral to her left eye. On examination she is tender over that area.



Temporal arteritis

- 59.** A 62-year-old woman presents with a two week history of shooting pains across her left cheek. The pain is sometimes triggered by touching her face. She has no past medical history note



Trigeminal neuralgia

- 60.** A 42-year-old man with a 3 month history of chronic cough presents with a persistent headache



Cluster headache

The correct answer is Sinusitis

This patient has chronic sinusitis. The cough is secondary to a post-nasal drip

Facial pain

The table below gives characteristic exam question features for conditions causing facial pain

Condition	Characteristic exam feature
Sinusitis	Facial 'fullness' and tenderness Nasal discharge, pyrexia or post-nasal drip leading to cough
Trigeminal neuralgia	Unilateral facial pain characterised by brief electric shock-like pains, abrupt in onset and termination May be triggered by light touch, emotion
Cluster headache	Pain typical occurs once or twice a day, each episode lasting 15 mins - 2 hours Clusters typically last 4-12 weeks Intense pain around one eye Accompanied by redness, lacrimation, lid swelling, nasal stuffiness
Temporal arteritis	Tender around temples Raised ESR

Rate question:

[Home](#) [About](#) [Contact](#) [Communities](#) [Tools](#) [Video](#) [Choose and Book](#)

[Log in](#) or [create an account](#)

[Skip to main content.](#)

[Skip to main Navigation.](#)



Information navigation

Search entire site

Enter a search term:

Main navigation

- [Health A-Z](#)
 - Hundreds of conditions explained
 - [Swine flu information](#)
 - [Arthritis information](#)
 - [Asthma information](#)
 - [Back pain information](#)
 - [Breast cancer information](#)
 - [Diabetes information](#)
 - [Eczema information](#)
 - [Heart disease information](#)
 - [Kidney infection information](#)
 - [Measles information](#)
 - [Menopause information](#)
 - [Testicular cancer information](#)
 - [Symptom checkers](#)
 - [Common health questions](#)
 - [Medicines A-Z](#)
 - [All A-Z topics](#)
- [Live Well](#)
 - Over 100 topics on healthy living
 - [Allergies articles](#)
 - [Alcohol articles](#)
 - [Birth to five guide articles](#)
 - [Depression articles](#)
 - [Fitness articles](#)

- [Healthy eating articles](#)
- [Lose weight articles](#)
- [Mental health articles](#)
- [Pain articles](#)
- [Pregnancy articles](#)
- [Sexual health articles](#)
- [Stop smoking articles](#)
- [Vaccinations articles](#)
- [Winter health articles](#)
- [Health check tools](#)
- [All Live Well](#)
- [Carers Direct](#)
 - Help for those looking after others
 - [Guide to caring](#)
 - [Money and legal](#)
 - [Work and learning](#)
 - [Your own wellbeing](#)
 - [Young carers](#)
 - [Carers' lives](#)
- [Health news](#)
 - Health news stories unspun
 - [News index](#)
 - [Topical questions and answers](#)
- [Find and choose services](#)



Don't miss out ...

Exercise your right to choice in the NHS

[Learn about patient choice now](#)

- [A&E search](#)
 - [Hospitals search](#)
 - [GPs search](#)
 - [Dentistssearch](#)
 - [Pharmacies search](#)
 - [Maternity search](#)
 - [Alcohol search](#)
 - [Mental health search](#)
 - [Consultants search](#)
 - [Opticians search](#)
-

[Sexual health search](#)

- [Stop smoking](#)
- [Walk-in centres](#)
- [All directories](#)

You are here:

- [The NHS in England](#)
- [Healthcare abroad](#)
- European Health Insurance Card

European Health Insurance Card

- Free EHIC
- [Applying and renewing](#)
- [Using an EHIC](#)
- [What's covered?](#)
- [EU regulations](#)
- European Health Insurance Card

About the EHIC



The European Health Insurance Card (EHIC) allows you to access state-provided healthcare in all European Economic Area (EEA) countries and Switzerland at a reduced cost or sometimes free of charge.

Everyone who is resident in the UK should have one and carry it with them when travelling abroad. Remember to check your EHIC is still valid before you travel. **Applying for the card is free** and it's valid for up to five years.

Presenting the EHIC entitles you to treatment that may become necessary during your trip, but doesn't allow you to go abroad specifically to receive medical care. However, maternity care, renal dialysis and managing the symptoms of pre-existing or chronic conditions that arise while abroad are all covered by the EHIC.

Your EHIC will allow you access to the same state-provided healthcare as a resident of the country you are visiting. However, many countries expect the patient to pay towards their treatment, and even with an EHIC,

you might be expected to do the same. You may be able to seek reimbursement for this cost when you are back in the UK if you are not able to do so in the other country.



The EHIC is NOT an alternative to travel insurance. It will not cover any private medical healthcare or the cost of things such as mountain rescue in ski resorts, repatriation to the UK or lost or stolen property.

For these reasons and others, it is important to have both an EHIC and a valid private travel insurance policy. Some insurers now insist you hold an EHIC and many will waive the excess if you have one.

Applying for an EHIC is easy. Even if you don't have any plans to travel in the near future, it is always a good idea to get one.

[Renew or apply for your free EHIC now.](#)

EHIC 1

See what can happen if you go on holiday without a European Health Insurance Card (EHIC)

Comments

[1 Comments about 'About the EHIC'](#)

[Our rules:](#)

Little mama said on 14 February 2011

Just want to thank the team for such a fantastic service. Ordered cards Thursday received on following Monday. Thank you!

[Report this content as offensive or unsuitable comment id 12372](#)

[Login](#) or [Register](#) to add your comment

[Share](#)

Last reviewed: 30/04/2009

Next review due: 29/04/2011

Contacts

Apply for an EHIC online <https://www.ehic.org.uk/>

For difficulties with the online application form, call the automated service on **0845 606 2030**.

Replace a lost or stolen card while you are abroad, claim refunds or for general enquiries about the EHIC call the Overseas Healthcare Team on **0044 (0)191 218 1999**

To update your personal details, call the EHIC enquiries team on **0845 605 0707**, if calling from abroad **0044 191 212 7500**

Useful links

NHS Choices links

- [Moving abroad](#)
- [Planned treatment abroad](#)
- [Country-by-country guide](#)
- [Health A-Z: altitude sickness](#)
- [Health A-Z: insect bites](#)
- [Health A-Z: malaria](#)
- [Health A-Z: travel health](#)
- [Health A-Z: travel sickness](#)
- [Health A-Z: travel vaccinations](#)
- [Health A-Z: travellers' diarrhoea](#)
- [Live Well: travel health](#)
- [Live Well: gap year health](#)
- [Videos: travel](#)

External links

- MDtravelhealth.com

- [fitfortravel](#)
- [FCO: travel advice](#)
- [MASTA](#)
- [NHS European Office - Healthcare in the EU](#)



[When and where to get your travel jabs](#)

Find out where to get travel vaccinations, including your GP surgery or high street travel vaccination clinics. Plus tips on how to prepare for travel jabs.

[Loading...Loading...Loading...](#) [Choices e-newsletters](#) [Your pages](#)

Site policies

[Terms and conditions](#) [Editorial policy](#) [Comments policy](#) [Syndication](#) [Privacy policy](#) [Links policy](#)
[Links library](#) [Personal accounts](#) [Accessibility](#) [Sitemap](#)

Other NHS sites

[Choose and Book](#) [HealthSpace](#) [NHS Direct](#) [NHS Scotland](#) [NHS Northern Ireland](#) [NHS Wales](#)
[NHS Careers](#) [NHS Choices Training](#) [Department of Health](#)

About the NHS

[History of the NHS](#) [About NHS services](#) [Choice in the NHS](#) [Quality accounts](#) [PROMs](#)

Other channels

[Follow us on Twitter](#) [Facebook](#) [YouTube](#) [Video library](#)

Contact NHS Choices

[Choices helpdesk](#)



Your Health e-newsletter

Sign up for our monthly e-newsletter, packed with health tips for you and your family.

[View example](#)

Your Health e-newsletter [Sign up](#)

More emails from NHS Choices

We also have some specialist e-newsletters that may be of interest.

[Your Pregnancy newsletter](#) ([view example](#)) [Your Baby newsletter](#) ([view example](#)) [Behind the Headlines newsletter](#) ([view example](#)) [Professionals newsletter](#) ([view example](#)) [Carers Direct newsletter](#) ([view example](#))

Create an NHS Choices account

With an account you can keep track of pages on the site and save them to this tab, which you can access on every page when you are logged in.

[Create account](#)

Already have an account? [Log in](#)

Saved pages

Keep track of important pages

Recently visited pages

Easily find again pages you have been reading

Pages you might like

Have pages recommended to you



Question 14 of 184



One of your GP colleagues asks you what revalidation will mean for her. What will revalidation assess?

- A. Fitness to hold a medical licence + suitability of current career choice
- B. Fitness to hold a medical licence + fitness to be on the GP Register + suitability of current career choice
- C. Fitness to be on the GP Register
- D. Fitness to hold a medical licence
- E. **Fitness to hold a medical licence + fitness to be on the GP Register**



Question stats

A	2.6%
B	7%
C	9.9%
D	17.7%
E	62.9%

62.9% of users answered this question correctly

Session score = 7.1%

Revalidation

Revalidation introduces a change in the way doctors are licensed and certificated. Currently UK doctors automatically receive their licence to practise if they have paid their annual fee and have no limitations on their registration (e.g. Following a GMC ruling). To practise as a GP doctors must also be on the GP Register - a process known as certification.

Following the introduction of revalidation doctors will be required to prove their fitness to practise to allow them to continue to work as a doctor. Revalidation will occur every 5 years and in one process combine relicensing and recertification. Annual appraisals will continue as before but there will be a focus on whether the doctor is making sufficient progress towards their revalidation portfolio.

The type and amount of evidence required will be similar to that needed for appraisals currently. The RCGP is creating an ePortfolio for the process and proposes that it should contain the following (please see the link for more details):

- description of your work
- description of any special circumstances (e.g. Prolonged illness)
- details of previous appraisals
- current personal development plan
- review of previous personal development plans
- evidence of continuing professional development - at least 50 'learning credits' are required per year
- multi-source feedback
- patient questionnaire surveys
- significant event audits
- review of any formal complaints
- probity/health statements

RCGP curriculum

3.1 - Clinical Governance

[Curriculum statement](#)

External links

[RCGP](#)

Revalidation

Learning credits

- minimum of 1 credit for each hour of education
- however, if the hour of education can be shown to lead to improvements in patient care then it will count as 2 credits

Submitting the evidence for revalidation

- the ePortfolio will be submitted electronically for review
- the review will be done by a 'Responsible Officer'
- the Responsible Officer is likely to be advised by a GP assessor and a trained lay person
- if the submitted evidence is considered sufficient the Responsible Officer will recommend to the GMC that the doctor is both relicensed and recertificated

Revalidation is due to be phased in from 2011 to 2016.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 6 of 188



Which one of the following is not a principle of the 1998 Data Protection Act?

- A. Individuals have a right of access to the information held about them
- B. Patients have the right to have factually incorrect information about them corrected
- C. Personal information may be kept for no longer than is necessary and must be kept up-to-date
- ✓ D. Entities which hold personal data must appoint a Data Protection Registrar to ensure the principles of the Act are implemented
- E. Data must be used for the specific purpose it was collected

Question stats

A	5.3%
B	14.1%
C	16.1%
D	50.4%
E	14.2%

50.4% of users answered this question correctly

Session score = 0%

Data Protection Act

The 1998 Data Protection Act is the main piece of legislation that governs the protection of personal data in the UK. The Act covers both manual and computerised records.

There are 8 main principles of the Data Protection Act:

- data must be used for the specific purpose it was collected
- data must not be disclosed to other parties without the consent of the individual whom it is about
- individuals have a right of access to the information held about them
- personal information may be kept for no longer than is necessary and must be kept up-to-date
- personal information may not be transmitted outside the European Union unless consent has been given
- all entities (e.g. a GP surgery) that process personal information must register with the Information Commissioner's Office
- adequate security measures must be in place. Those include technical measures (e.g. passwords, firewalls) and organisational measures (e.g. staff training)
- subjects (i.e. patients) have the right to have factually incorrect information about them corrected

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Information Commissioner's Office](#)

Guidelines on recording opinions

Question 7 of 188


Which one of the following best describes the General Medical Services contract?

- A. Nationally agreed, locally managed contract between a General Practitioner and the local primary care trust
- B. Nationally agreed, locally managed contract between a Practice and the Department of Health
- ✓ C. **Nationally agreed, locally managed contract between a Practice and the local primary care trust**
- D. Locally agreed, locally managed contract between a Practice and the local primary care trust
- E. Locally agreed, locally managed contract between a General Practitioner and the local primary care trust

Question stats

A		12.1%
B		9.9%
C		71.1%
D		5.2%
E		1.7%

71.1% of users answered this question correctly

Session score = 0%

GMS - nationally agreed, locally managed contract between a Practice and the local primary care trust

GP contract: GMS contract

A General Medical Services (GMS) contract is made between a Practice and the local primary care trust

Key elements

- a nationally agreed, locally managed contract
- describes services provided by the Practice, divided into essential, additional and enhanced (see below)

Essential services	Additional services	Enhanced services
<ul style="list-style-type: none"> • Day-to-day medical care • Management of patients who are terminally ill • Chronic disease management 	<ul style="list-style-type: none"> • Contraception services • Vaccination services • Cervical screening • Child health surveillance • Maternity services • Minor surgery 	<ul style="list-style-type: none"> • Directed enhanced services • National enhanced services • Local enhanced services

Examples of Directed Enhanced Services (DES)

- Learning Disabilities DES - annual health checks for people on the local authority learning disability register. To participate in this DES, practices

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

need to attend a multi professional education session run by their PCT.
Practices will get £100 for every health check

- Heart Failure DES - improving the treatment of heart failure and including incentives to provide beta-blockers to appropriate patients. Practices will get £35 per patient treated under this DES.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 8 of 188



With reference to the Quality and Outcomes Framework (QOF), which component is responsible for the second highest number of points?

- A. Child health surveillance
- B. Clinical indicators
- ✓ C. **Organisational**
- D. Additional services
- E. Patient experience

Question stats

A	9.5%
B	18.8%
C	53.1%
D	9.9%
E	8.7%

53.1% of users answered this question correctly

Session score = 0%

Quality and Outcomes Framework

The Quality and Outcomes Framework (QOF) is the annual reward and incentive programme detailing GP practice achievement results. It was introduced as part of the new General Medical Services (GMS) to incentivise not only the management of chronic disease such as diabetes but also to improve the organisation of the practice and patient experience

Other points

- for clinical indicators the value of a point is determined by the prevalence of that condition in the practice
- participation in the QOF is voluntary
- 5% of practices should be visited at random to help prevent fraud. The PCT visiting team will normally consist of a PCT management representative, a GP and a patient representative

The table below shows the four key areas on which the QOF is based

Clinical indicators	697 points	Standards linked to the care of patients suffering from chronic diseases
Organisational	167.5 points	Standards relating to records and information, communicating with patients, education and training, medicines management and clinical and practice management
Additional services	44 points	Covering cervical screening, child health surveillance, maternity services and contraceptive services
Patient experience	91.5 points	Based on patient surveys and length of consultations

Patients may be 'exception reported' in the following situations:

- patients who have been recorded as refusing to attend review who have

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

- been invited on at least three occasions during the preceding 12 months
- patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances e.g. Terminal illness, extreme frailty
- patients newly diagnosed within the practice or who have recently registered with the practice, who should have measurements made within 3 months and delivery of clinical standards within 9 months e.g. Blood pressure or cholesterol measurements within target levels
- patients who are on maximum tolerated doses of medication whose treatment remain sub-optimal
- patients for whom prescribing a medication is not clinically appropriate e.g. Those who have an allergy, another contraindication or have experienced an adverse reaction
- where a patient has not tolerated medication
- where a patient does not agree to investigation or treatment (informed dissent), and this has been recorded in their medical records
- where the patient has a supervening condition which makes treatment of their condition inappropriate e.g. Cholesterol reduction where the patient has liver disease
- where an investigative service or secondary care service is unavailable

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 9 to 11 of 188



Theme: Benefits

- A Bereavement Allowance
- B Bereavement Payment
- C Statutory Sick Pay
- D Disability Living Allowance
- E Employment and Support Allowance
- F State pension
- G Income Support
- H Job Seekers Allowance
- I No benefits claimable

For each of the following scenarios select the claimable benefit

9. 20-year-old man with severe autism who needs carers to help him with personal care



Bereavement Allowance

The correct answer is Disability Living Allowance

10. 56-year-old council worker who has not been working for 10 months due to back pain



Bereavement Allowance

The correct answer is Employment and Support Allowance

Employment and Support Allowance replaced Incapacity Benefit for new claimants from October 2008

11. Lump sum payment for a 55-year-old woman whose husband has just died



Bereavement Allowance

The correct answer is Bereavement Payment

Question stats

Average score for registered users:

9	<div></div>	90.9%
10	<div></div>	40.4%
11	<div></div>	76.6%

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Benefits

Whilst GPs are not supposed to be experts on claimable benefits, a rough understanding is expected

Income support	Aged 16-59 years, on low income, working less than 16 hours per week and not receiving Job Seekers Allowance
Job Seekers Allowance	From 19 years old to state pension age. Claimants must be capable of working and agree to actively seek work
Disability Living Allowance	Tax-free benefit for children and adults who need help with personal care or have walking difficulties because they are physically or mentally disabled
Statutory Sick Pay	For employees unable to work due to illness. Unable to work for > 4 days in a row. Paid up to a maximum of 28 weeks
Incapacity Benefit & Employment and Support Allowance	Employment and Support Allowance replaced Incapacity Benefit for new claimants from October 2008. Claimable by those not entitled to Statutory Sick Pay (SSP), for example self-employed, or when SSP has ended
Retirement pension	State pension may be claimed from 60 years for women and 65 years for men. State pensions are taxable and paid even if the claimant is still working
Bereavement payment	Lump sum given to spouse if they are under state pension age when their partner died Depends on national insurance contributions Not payable to divorcees
Bereavement allowance	Taxable weekly benefit paid to the spouse for up to 52 weeks from the date of death, if the surviving partner is 45 years or older and less than the state pension age
Health in Pregnancy Grant	Payable to pregnant women between the 25th week of pregnancy and expected date of delivery. One-off lump sum, patients need form signing by midwife or doctor. Due to be scrapped from the 1st January 2011.

Rate question:

Question 12 of 188



Which one of the following is a valid reason for exception reporting a patient under the quality and outcomes framework (QOF)?

- A. A patient who is housebound
- B. A patient who lives more than 3 miles from the practice
- C. A patient who has a chaotic lifestyle such as an intravenous drug user
- ✓ D. A patient who registered to the practice 2 months ago
- E. A patient who has refused to attend surgery on two separate occasions in the past 12 months

Question stats

A	7.4%
B	2.6%
C	5%
D	55.7%
E	29.3%

55.7% of users answered this question correctly

Session score = 0%

Quality and Outcomes Framework

The Quality and Outcomes Framework (QOF) is the annual reward and incentive programme detailing GP practice achievement results. It was introduced as part of the new General Medical Services (GMS) to incentivise not only the management of chronic disease such as diabetes but also to improve the organisation of the practice and patient experience

Other points

- for clinical indicators the value of a point is determined by the prevalence of that condition in the practice
- participation in the QOF is voluntary
- 5% of practices should be visited at random to help prevent fraud. The PCT visiting team will normally consist of a PCT management representative, a GP and a patient representative

The table below shows the four key areas on which the QOF is based

Clinical indicators	697 points	Standards linked to the care of patients suffering from chronic diseases
Organisational	167.5 points	Standards relating to records and information, communicating with patients, education and training, medicines management and clinical and practice management
Additional services	44 points	Covering cervical screening, child health surveillance, maternity services and contraceptive services
Patient experience	91.5 points	Based on patient surveys and length of consultations

Patients may be 'exception reported' in the following situations:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

- patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the preceding 12 months
- patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances e.g. Terminal illness, extreme frailty
- patients newly diagnosed within the practice or who have recently registered with the practice, who should have measurements made within 3 months and delivery of clinical standards within 9 months e.g. Blood pressure or cholesterol measurements within target levels
- patients who are on maximum tolerated doses of medication whose treatment remain sub-optimal
- patients for whom prescribing a medication is not clinically appropriate e.g. Those who have an allergy, another contraindication or have experienced an adverse reaction
- where a patient has not tolerated medication
- where a patient does not agree to investigation or treatment (informed dissent), and this has been recorded in their medical records
- where the patient has a supervening condition which makes treatment of their condition inappropriate e.g. Cholesterol reduction where the patient has liver disease
- where an investigative service or secondary care service is unavailable

Rate question:

Question 13 of 188


Eight doctors meet to discuss 'problem' patients on an informal basis. They take it in turns to talk about why they find the patient difficult to deal with. Following this the other doctors discuss aspects of the doctor-patient relationship. Which one of the following does this best describe?



- A. **Balint group**
- B. RCGP feedback model
- C. Pendleton discussion
- D. Fraser meeting
- E. Neighbour group

Question stats

A	<div style="width: 72.2%;"></div>	72.2%
B	<div style="width: 7.6%;"></div>	7.6%
C	<div style="width: 9.2%;"></div>	9.2%
D	<div style="width: 5.2%;"></div>	5.2%
E	<div style="width: 5.8%;"></div>	5.8%

72.2% of users answered this question correctly

Session score = 0%

Balint groups

Michael Balint (1896-1970) was a Hungarian psychoanalyst and psychiatrist who shaped many of the modern views on patient centred healthcare. He was primarily interested in the psychological and emotional problems that underlie many presenting complaints. His work encouraged GPs to explore these areas to understand their patients better. Balint coined the phrase 'the doctor as a drug'.

During the 1950's he established small, groups ('Balint Groups') which allowed GPs to discuss their patients on an informal basis. These are not dissimilar to discussions held amongst GP Registrars during their half-day release.

Balint's ideas were published in the book 'The doctor, his patient and the illness'.

Rate question:
RCGP curriculum

2 - The General Practice Consultation

[Curriculum statement](#)

Question 14 of 188



You receive a phone call from one of your patients who is abroad. He is 60-years-old and has just been discharged following admission to a Spanish hospital after suffering a myocardial infarction. There were no reported complications and he did not undergo a percutaneous coronary intervention. How soon after the myocardial infarction can he fly home?

- A. After 3-5 days
- B. After 14 days
- C. After 4 weeks
- D. After 48 hours if no further chest pain
- E. After 7-10 days



Fitness to fly - MI - after 7-10 days

Fitness to fly

The Civil Aviation Authority (CAA) has issued guidelines on air travel for people with medical conditions; please see the link provided.

Cardiovascular disease

- unstable angina, uncontrolled hypertension, uncontrolled cardiac arrhythmia, decompensated heart failure, severe symptomatic valvular disease: should not fly
- uncomplicated myocardial infarction: may fly after 7-10 days
- complicated myocardial infarction: after 4-6 weeks
- coronary artery bypass graft: after 10-14 days
- percutaneous coronary intervention: after 5 days

Respiratory disease

- pneumonia: should be 'clinically improved with no residual infection'
- pneumothorax: absolute contraindication, the CAA suggest patients may travel 2 weeks after successful drainage if there is no residual air. The British Thoracic Society used to recommend not travelling by air for a period of 6 weeks but this has now been changed to 1 week post check x-ray

Pregnancy

- most airlines do not allow travel after 36 weeks for a single pregnancy and after 32 weeks for a multiple pregnancy

Question stats

A	7.8%
B	12.1%
C	18%
D	10.6%
E	51.5%

51.5% of users answered this question correctly

Session score = 0%

External links

[Civil Aviation Authority](#)

Fitness to fly guidelines

- most airlines require a certificate after 28 weeks confirming that the pregnancy is progressing normally

Surgery

- travel should be avoided for 10 days following abdominal surgery
- laparoscopic surgery: after 24 hours
- colonoscopy: after 24 hours
- following the application of a plaster cast, the majority of airlines restrict flying for 24 hours on flights of less than 2 hours or 48 hours for longer flights

Haematological disorders

- patients with a haemoglobin of greater than 8 g/dl may travel without problems (assuming there is no coexisting condition such as cardiovascular or respiratory disease)

Rate question:

Question 15 of 188



Which one of the following consultation models advocates finding out the reason for the patient's attendance in terms of ideas, concerns and expectations?

- A. Stott and Davis
- B. Stewart
- ✓ C. Pendleton
- D. Neighbour
- E. Tuckett

There are also elements of exploring ideas, concerns and expectations in the Calgary-Cambridge model.

Consultation models

Calgary-Cambridge observation guide- Kurtz and Silverman - 1996

- initiating the session
- gathering information
- building the relationship
- giving information, explaining and planning
- closing the session

Stewart - patient-centred clinical method - 1995. 2003

- exploring both the disease and the illness experience
- understanding the whole person
- finding common ground
- incorporating prevention and health promotion
- enhancing the doctor-patient relationship
- being realistic (with time and resources)

Pendleton - The Consultation: an Approach to Learning and Teaching - 1984, 2003

- define the reason for the patient's attendance (ideas, concerns and expectations)
- consider other problems
- with the patient, choose an appropriate action for each problem
- achieve a shared understanding of the problems with the patient
- involve the patient in the management and encourage him/her to accept appropriate responsibility
- use time and resources appropriately
- establish or maintain a relationship with the patient which helps to achieve the other tasks

Fraser - Areas of competence - 1992

Question stats

A	7%
B	4.4%
C	69%
D	17.4%
E	2.2%

69% of users answered this question correctly

Session score = 6.7%

RCGP curriculum

2 - The General Practice Consultation

[Curriculum statement](#)

- interviewing and history-taking
- physical examination
- diagnosis and problem-solving
- patient management
- relating to patients
- anticipatory care
- record keeping

Neighbour - The Inner Consultation - five checkpoint model - 1987

- connecting
- summarising
- handing over
- safety netting
- housekeeping

Tuckett - meeting of two experts - 1985

- the consultation is a meeting between two experts
- doctors are experts in medicine
- patients are experts in their own illnesses
- shared understanding is the aim
- doctors should seek to understand the patient's beliefs
- doctors should address explanations in terms of the patient's belief system



Stott and Davis - Exceptional potential of the consultation - 1979

- management of presenting problems
- management of continuing problems
- modification of help-seeking behaviour
- opportunistic health promotion

Rate question:

Question 16 of 188


Which one of the following statements regarding appraisal is incorrect?

- A. The appraiser may be a non-principal
- B. Formal training is required to become an appraiser
-  C. **It is compulsory**
- D. The average time commitment for appraisal is a minimum of 4.5 to 6.5 hours
-  E. **Practices are responsible for funding locum cover**

Primary care trusts are responsible for funding locum cover to compensate for time lost to appraisals

Appraisal

Appraisal has been a requirement for GPs since 2002. It is meant to be a formative process identifying development needs rather than performance management.






Appraisal will eventually provide a regular, structured system for recording progress towards revalidation and identifying development needs

The appraiser should be another GP (principal or non-principal), who will have been properly trained in appraisal. Typically the average time commitment for appraisal is a minimum of 4.5 to 6.5 hours. This includes between 2 and 4 hours for preparation. Primary Care Trusts should provide funds for locum cover to compensate for this time

The content of appraisal is based on the core headings set out in the GMC's Good Medical Practice document:

- good clinical care
- maintaining good medical practice
- relationships with patients
- working with colleagues
- teaching and training
- probity
- health

Rate question:
Question stats

A		10.2%
B		5.8%
C		6.5%
D		26.8%
E		50.7%

50.7% of users answered this question correctly

Session score = 6.3%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 17 of 188



The District Nurse requests a prescription for a syringe driver. This is for a patient you saw earlier in the day who is dying of metastatic renal cancer. You would like her to receive 60mg of diamorphine over a 24 hour period. Which one of the following is the correct wording of the prescription?

- A. 180mg of diamorphine in 6 ampoules. 60mg (sixty milligrams) daily by subcutaneous infusion over 24 hours.
- B. Diamorphine 30mg ampoules. Supply 6 ampoules. 60mg (sixty milligrams) daily by subcutaneous infusion over 24 hours.
- C. Diamorphine 30mg (thirty milligrams) ampoules. Supply 6 ampoules. 60mg daily by subcutaneous infusion over 24 hours.
- D. 180mg of diamorphine in 6 (six) ampoules. 60mg daily by subcutaneous infusion over 24 hours.
- ✓ E. **Diamorphine 30mg ampoules. Supply 6 (six) ampoules. 60mg daily by subcutaneous infusion over 24 hours.**

Controlled drugs - it is the quantity supplied which needs to be stated in both figures and words, rather than the dosage

Controlled drugs

When prescribing a controlled drug the following must be present on the prescription:

- name and address of the patient
- the form, and where appropriate the strength, of the preparation

- either the total quantity (in both words and figures) of the preparation, or the number (in both words and figures) of dosage units to be supplied

- the dose (cannot write 'as directed')
- prescribers name, signature, address and current date

The 2001 Misuse of Drugs Regulations act defines who is authorised to prescribe controlled drugs. It divided drugs of potential abuse into 5 categories ('schedules') each with own rules on prescribing, supply, possession, record keeping etc

Schedule 1	Cannabis, lysergide
Schedule 2	Diamorphine, morphine, pethidine, amphetamine, cocaine
Schedule	Barbiturates, buprenorphine, midazolam*, temazepam**

Question stats

A	5.6%
B	20.6%
C	14%
D	10.5%
E	49.3%

49.3% of users answered this question correctly

Session score = 5.9%

RCGP curriculum

3.2 - Patient Safety

[Curriculum statement](#)

External links

[UK Government](#)

Misuse of Drugs Regulations 2001

3	
Schedule 4	<p>Part 1: Benzodiazepines (except midazolam and temazepam) and zolpidem</p> <p>Part 2: Androgenic and anabolic steroids, hCG, somatropin</p> <p>Controlled drug prescription requirements do not apply and Schedule 4 controlled drugs are not subject to safe custody requirements</p>
Schedule 5	Includes preparations which because of their strength are exempt from the vast majority of Controlled Drug requirements other than retention of invoices (e.g. Oramorph 10mg/5ml)

Further selected points

- Schedule 2 and 3 drugs are marked 'CD' in the BNF
- a prescription for controlled drugs in Schedules 2,3 & 4 is valid for 28 days
- a pharmacist is generally not allowed to dispense unless all the information required by law is given. With Schedule 2 and 3 drugs a pharmacist is allowed to amend the prescription if 'it specifies the total quantity only in words or in figures or if it contains minor typographical errors, provided that such amendments are indelible and clearly attributable to the pharmacist making them'

*midazolam was changed from schedule 4 to 3 in 2008

**temazepam is excluded from the prescription requirements

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 18 of 188



A 35-year-old patient who you have known for five years requests antibiotics for a suspected urinary tract infection (UTI) during a telephone consultation. She reports a two day history of dysuria and frequency and had a proven UTI last year with identical symptoms. According to GMC guidance what is the most appropriate action?



- Antibiotics can be prescribed, with normal safeguards and advice
- If the patient cannot be persuaded to come in then antibiotics can be prescribed
- If the patient has been seen in the past 3 months then antibiotics can be prescribed, with normal safeguards and advice
- Antibiotics should not be prescribed during a telephone consultation
- Advise the patient to phone NHS direct

Question stats

A	<div></div>	66.9%
B	<div></div>	13.2%
C	<div></div>	8.6%
D	<div></div>	11%
E	<div></div>	0.3%

66.9% of users answered this question correctly

Session score = 11.1%

The GMC guidance allows for telephone prescribing as long as normal safeguards are adhered to

GMC guidance: Good Practice in Prescribing Medicines

Good Practice in Prescribing Medicines was published in 2008. A link is provided to the full guidance, below is only selected highlights:

Principles of prescribing

- doctors with full registration may prescribe all medicines, but not those drugs in Schedule 1 of the Misuse of Drugs Regulations 2001
- you should only prescribe drugs to meet identified needs of patients and never for your own convenience or simply because patients demand them
- avoid treating yourself and those close to you

Keeping up to date and prescribing in patients' best interests

- the guidelines make specific mention of the BNF, NICE and SIGN
- you should inform the Committee on the Safety of Medicines of adverse reactions to medicines reported by your patients in accordance with the Yellow Card Scheme
- if you prescribe at the recommendation of a nurse or other healthcare professional who does not have prescribing rights, you must be satisfied that the prescription is appropriate for the patient concerned and that the professional is competent to have recommended the treatment

Doctors' interests in pharmacies

- you should ensure that your patients have access to information about your own and (where known) your employers' financial or commercial interests in any pharmacy they are likely to use

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[GMC](#)

Good Practice in Prescribing Medicines

Prescribing controlled drugs for yourself or someone close to you

- doctors should, wherever possible, avoid treating themselves or anyone with whom they have a close personal relationship and should be registered with a GP outside their family
- you should not prescribe a controlled drug for yourself or someone close to you unless no other person with the legal right to prescribe is available to assess the patient's clinical condition and to prescribe without a delay which would put the patient's life or health at risk, or cause the patient unacceptable pain, and that treatment is immediately necessary to save life, avoid serious deterioration in the patient's health or alleviate otherwise uncontrollable pain

Remote prescribing via telephone, email, fax, video link or a website

- this is supported in the guidelines with obvious caveats
- if you are 'not providing continuing care for the patient', for example doing out-of-hours the guidelines recommend giving an explanation to the patient of the processes involved in remote consultations and giving your name and GMC number to the patient

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 19 of 188



You are a GP registrar. You receive a letter from an orthopaedic consultant after referring a 60-year-old man with right knee osteoarthritis. He is annoyed you discussed the possibility of a knee replacement with the patient saying that this is not yet indicated and adding that it 'made my discussions with the patient most difficult'. He advises 'it would be better if I stick to my job and you stick to yours'. How should you respond to this?

- ✓ A. Write a reply to the consultant saying that you were disappointed by the tone of his letter and felt discussing knee replacement was appropriate
- B. Write a letter stating that you will not refer patients to him on a private basis unless he writes you a letter of apology
- ✗ C. Write a letter of apology to the consultant
- D. Call the patient in, explain the contents of the letter and advise the patient to switch consultants
- E. Take no action

It is not unreasonable to discuss potential secondary care management with a patient and in many ways is good practice. The letter from the consultant is therefore inappropriate.

The professional approach would therefore be to write a polite letter explaining your point of view. Accepting that the colleague is rude is a poor option as the consultant may not genuinely understand the role of General Practice. Apologising is a poor option as it will simply perpetuate such behaviour.

Trying to get the patient on 'your side' interferes with patient care and is unprofessional. Effectively blackmailing the consultant is also a bad idea!

—

Rate question:

Question stats

A	<div style="width: 76.5%;"></div>	76.5%
B	<div style="width: 0.5%;"></div>	0.5%
C	<div style="width: 9.7%;"></div>	9.7%
D	<div style="width: 0.9%;"></div>	0.9%
E	<div style="width: 12.4%;"></div>	12.4%

76.5% of users answered this question correctly

Session score = 10.5%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Questions 20 to 22 of 188



Theme: DVLA: neurological disorders

- A** No restriction
- B** No restriction but inform DVLA
- C** 1 month off
- D** 3 months off
- E** 6 months off
- F** 12 months off
- G** Once satisfactory control of symptoms

For each of the following scenarios select the most appropriate advice regarding driving:

20. Stroke - satisfactory clinical recovery



1 month off

21. Transient ischaemic attack - single episode



1 month off

22. Unexplained syncope. Second episode in past 2 months. Under investigation by cardiologist for abnormal echocardiogram



6 months off

If low risk of recurrence then only restricted for 4 weeks

Question stats

Average score for registered users:

20		68.1%
21		74.9%
22		35.9%

Session score = 22.7%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DVLA](#)

Neurological disorder guidelines

DVLA: neurological disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Specific rules

- first seizure: 6 months off driving*. For patients with established epilepsy they must be fit free for 12 months before being able to drive
- stroke or TIA: 1 month off driving
- multiple TIAs over short period of times: 3 months off driving
- craniotomy e.g. For meningioma: 1 year off driving**
- pituitary tumour: craniotomy: 6 months; trans-sphenoidal surgery 'can drive when there is no debarring residual impairment likely to affect safe driving'
- narcolepsy/cataplexy: cease driving on diagnosis, can restart once 'satisfactory control of symptoms'

Syncope

- simple faint: no restriction
- unexplained, low risk of recurrence: 4 weeks off
- explained and treated: 4 weeks off
- unexplained: 6 months off

*previously rule was 12 months. It is now 6 months off driving if the licence holder has undergone assessment by an appropriate specialist and no relevant abnormality has been identified on investigation, for example EEG and brain scan where indicated

**if the tumour is a benign meningioma and there is no seizure history, licence can be reconsidered 6 months after surgery if remains seizure free

Rate question:

Question 23 of 188



A 68-year-old woman who has recently been diagnosed with metastatic pancreatic cancer presents for review. She has heard she may be eligible for benefits to help with personal care. What is the most appropriate form to fill in?



- A. SF300
- B. **DS1500**
- C. Incapacity Benefit form
- D. Disability Living Allowance form
- E. SC1

As this patient has a poor prognosis her application for attendance allowance (not Disability Living Allowance as she is over 65 years) should be fast-tracked using the DS1500 form

The SF300 is a form used by people applying for a Community Care Grant

Benefits: chronic illness and cancer patients

Patients who have a chronic illness or cancer, which results in a disability severe enough to need help with caring for themselves, are entitled to claim the following benefits:

- Disability Living Allowance: for patients under the age of 65 years
- Attendance Allowance: for patients over aged 65 years and over

Disability Living Allowance

Disability Living Allowance (DLA) can be claimed by patients who normally have needed help for at least 3 months and be likely to need it for at least a further 6 months. It is tax-free, not means tested and divided into two components:

- Care component
- Mobility component

Attendance Allowance

Attendance Allowance (AA) is a tax-free allowance for people aged 65 or over when they claim who need help with their personal care. To claim AA patients should normally have needed help with care for 6 months. Like DLA it is not means tested

Terminally ill patients

Patients who have a terminal illness (where there is an expectation that the patient will not live for more than 6 months) are eligible to be fast-tracked through the system for claiming DLA or AA. A **DS1500** form is completed which

Question stats

A	<div style="width: 3.2%;"></div>	3.2%
B	<div style="width: 75.9%;"></div>	75.9%
C	<div style="width: 7.2%;"></div>	7.2%
D	<div style="width: 9.9%;"></div>	9.9%
E	<div style="width: 3.8%;"></div>	3.8%

75.9% of users answered this question correctly

Session score = 21.7%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

ensures the application is dealt with promptly and that the patient automatically receives the higher rate

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 1 of 165


Which one of the following drugs should be prescribed using the proprietary, rather than the generic name?

- A. Paroxetine
- B. Clozapine
- C. Lofepramine
- ✓ D. **Carbamazepine**
- E. Sumatriptan

Question stats

A		6.2%
B		25.1%
C		7.9%
D		49.9%
E		10.9%

49.9% of users answered this question correctly

Session score = 0%

Prescribing guidance

The BNF issues guidance on good practice when prescribing, selected points include:

- drugs should generally be prescribed by their generic name, except for certain preparations where the clinical effect may differ - please see the list below
- when writing numbers unnecessary decimal points should be avoided e.g. 250 ml not 0.25 l

Drugs which should be prescribed by brand

- modified release calcium channel blockers
- antiepileptics
- ciclosporin and tacrolimus
- mesalazine
- lithium
- aminophylline and theophylline
- methylphenidate
- CFC-free formulations of beclometasone
- dry powder inhaler devices

Rate question:

RCGP curriculum

3.2 - Patient Safety

[Curriculum statement](#)

Question 2 of 165



A 15-year-old boy from Birmingham is brought to surgery by his mother complaining of abdominal pains for the past two days. On examination there is a clinical suspicion of appendicitis and a referral to hospital is planned. On discussing this with the patient he refuses to be admitted as he had planned to go to a party tonight. He is able to understand all information you give him and repeat it, including the serious nature of untreated appendicitis. What is the most appropriate course of action?

- A. An independent legal guardian should be appointed
- B. As he has demonstrated capacity his wishes should be respected
- C. An approved social worker should be contacted
- D. A psychiatric opinion is mandatory before further management
- E. His mother may overrule his wishes



In England and Wales a child has the ability to consent to, but not refuse, treatment. Whether a child has demonstrated capacity (as per the Fraser guidelines) is not the relevant issue.

Consent: children

The General Medical Council have produced guidelines on obtaining consent in children:

- at 16 years or older a young person can be treated as an adult and can be presumed to have capacity to decide
- under the age of 16 years children may have capacity to decide, depending on their ability to understand what is involved
- where a competent child refuses treatment, a person with parental responsibility or the court may authorise investigation or treatment which is in the child's best interests*

With regards to the provision of contraceptives to patients under 16 years of age the Fraser Guidelines state that all the following requirements should be fulfilled:

- the young person understands the professional's advice
- the young person cannot be persuaded to inform their parents
- the young person is likely to begin, or to continue having, sexual intercourse with or without contraceptive treatment
- unless the young person receives contraceptive treatment, their physical or mental health, or both, are likely to suffer
- the young person's best interests require them to receive contraceptive advice or treatment with or without parental consent

Gillick or Fraser?

Some doctors use the term Fraser competency when referring to contraception

Question stats

A	1.2%
B	24.3%
C	1.4%
D	0.5%
E	72.7%

72.7% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[General Medical Council](#)
Consent guidelines

and Gillick competency when referring to general issues of consent in children.
The (widespread) rumours that Victoria Gillick removed her permission to use her name or applied copyright have recently been debunked.

More information can be found in the following article:

Wheeler R. Gillick or Fraser? A plea for consistency over competence in children
BMJ 2006; 332: 807

*in Scotland those with parental responsibility cannot authorise procedures a competent child has refused

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 3 of 165



You are a GP registrar. Whilst parking at the surgery you notice a 34-year-old epileptic man also parking in the patient's car park. He has an appointment with you this morning. You know from previous consultations that his last fit was 7 months ago. During the consultation the patient denies driving. What is the most appropriate action?



- A. Take the patient at their word and take no further action
- B. Inform him of the DVLA rules and your duty to inform the DVLA if he refuses to stop
- C. Inform the DVLA immediately after telling the patient what you are going to do
- D. Inform the DVLA anonymously to maintain the doctor-patient relationship
- E. Confiscate his car keys during the consultation to prevent danger to the public

You have seen the patient drive yourself so it is wrong to simply ignore the situation. The best option is to inform him of the DVLA rules and your duty to notify the DVLA if he refuses to stop. Informing the DVLA immediately is not the best option as it does not allow the patient to rectify the situation themselves and may damage your long term relationship. It is always better to be honest and open with patients about your actions.

Confiscating the patient's keys is impractical and likely to lead to confrontation.

Please note that the new '6 month rule' only applies following a first fit which has been investigated, rather than to patients with existing epilepsy.

—

Rate question:

Question stats

A	0.8%
B	89.7%
C	8.9%
D	0.4%
E	0.2%

89.7% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 4 of 165



You are counselling the wife of a man who has died unexpectedly of a myocardial infarction. Two weeks after his death she mentions some financial problems she is having. Which one of the following determines whether she qualifies for the Bereavement Payment?



- A. No qualifying criteria
- B. Age < 65 years + national insurance contributions
- C. Age > 65 years + national insurance contributions
- D. National insurance contributions
- E. Age < 65 years

Question stats

A	<div></div>	17.7%
B	<div></div>	35.1%
C	<div></div>	10.1%
D	<div></div>	10.9%
E	<div></div>	26.2%

35.1% of users answered this question correctly

Session score = 0%

Benefits: bereavement

Whilst GPs are not supposed to be experts on claimable benefits, a rough understanding is expected

Funeral payment	One-off payment to the partner or parent of the deceased if they are on benefits to help pay for a funeral
Bereavement payment	Lump sum given to spouse if they are under the state pension age when their partner died Depends on national insurance contributions Not payable to divorcees
Bereavement allowance	Taxable weekly benefit paid to the spouse for up to 52 weeks from the date of death, if the surviving partner is 45 years or older and less than the state pension age
Widowed Parent's Allowance	Payable to a parent whose husband or wife has died. Eligibility <ul style="list-style-type: none">surviving partner is bringing up a child < 19 years of age and receiving child benefitdeceased partner had made adequate national insurance contributionsalso if the woman was expecting her late husband's babydivorcees and those who remarry and not eligible to claim

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DirectGov](#)
Bereavement benefits

Rate question:

Question 5 of 165


Which coding system is being brought in by NHS Connecting For Health to replace Read codes?



- A. CDISC
- B. **SNOMED CT**
- C. MEDCIN
- D. NHSCS
- E. DOCLE

Question stats

A	6.8%
B	56.5%
C	11.9%
D	21.9%
E	2.8%

56.5% of users answered this question correctly

Session score = 0%

Information management and technology

Information management and technology is one of the key parts of the RCGP curriculum

Clinical coding systems

- Read codes: used to code almost any aspect of medical care including symptoms, examinations, investigations, administration, diagnoses and treatment
- SNOMED CT (Systematized Nomenclature of Medicine -- Clinical Terms) is a new system which is replacing Read codes. It will be used by NHS Connecting For Health as the standard terminology for the NHS Care Records Service

Connecting for health

- the NHS Care Records Service (NHS CRS) will be connected by what is known as 'the spine'
- a key part of the NHS CRS will be the gradual development of an electronic Summary Care Record
- Choose and Book will allow GPs and other primary care staff to make initial hospital or clinic outpatient appointments using the spine
- provide a Secondary Uses Service (SUS), using anonymised data for business reports and statistics for research and planning purposes
- Electronic Prescription Service (EPS) is being planned meaning GPs will prescribe a drug electronically after which pharmacists will be able to dispense without a written prescription

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Rate question:

Question 6 of 165


A patient asks for a copy of her medical records. Which one of the following documents is most applicable to this request?



- A. **Data Protection Act 1998**
- B. Patient Records Act 2007
- C. NHS Constitution
- D. Freedom of Information Act 2000
- E. BMA 'Information for Patients' guidelines

The Freedom of Information Act 2000 does not normally deal with requests for personal data. The Patient Records Act 2007 is fictional.

Data Protection Act

The 1998 Data Protection Act is the main piece of legislation that governs the protection of personal data in the UK. The Act covers both manual and computerised records.

There are 8 main principles of the Data Protection Act:

- data must be used for the specific purpose it was collected
- data must not be disclosed to other parties without the consent of the individual whom it is about
- individuals have a right of access to the information held about them
- personal information may be kept for no longer than is necessary and must be kept up-to-date
- personal information may not be transmitted outside the European Union unless consent has been given
- all entities (e.g. a GP surgery) that process personal information must register with the Information Commissioner's Office
- adequate security measures must be in place. Those include technical measures (e.g. passwords, firewalls) and organisational measures (e.g. staff training)
- subjects (i.e. patients) have the right to have factually incorrect information about them corrected

Rate question:

Question stats

A		58.8%
B		14.3%
C		1%
D		25%
E		0.8%

58.8% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)


External links

[Information Commissioner's Office](#)

Guidelines on recording opinions

Question 7 of 165


A 21-year-old female is seen in the first seizure clinic in the outpatient department. Both the EEG and MRI brain are normal. A decision is made not to start her on anti-epileptic medication. What restrictions on driving should she be informed about?

- A. No restrictions but inform DVLA
- B. No restrictions, no need to inform DVLA if not on medication
- C. Cannot drive for 1 month from date of seizure
-  D. **Cannot drive for 6 months from date of seizure**
- E. Cannot drive for 1 year from date of seizure

Patients cannot drive for 6 months following a seizure

DVLA: neurological disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Specific rules

- first seizure: 6 months off driving*. For patients with established epilepsy they must be fit free for 12 months before being able to drive
- stroke or TIA: 1 month off driving
- multiple TIAs over short period of times: 3 months off driving
- craniotomy e.g. For meningioma: 1 year off driving**
- pituitary tumour: craniotomy: 6 months; trans-sphenoidal surgery 'can drive when there is no debarring residual impairment likely to affect safe driving'
- narcolepsy/cataplexy: cease driving on diagnosis, can restart once 'satisfactory control of symptoms'

Syncope

- simple faint: no restriction
- unexplained, low risk of recurrence: 4 weeks off
- explained and treated: 4 weeks off
- unexplained: 6 months off

*previously rule was 12 months. It is now 6 months off driving if the licence holder has undergone assessment by an appropriate specialist and no relevant abnormality has been identified on investigation, for example EEG and brain scan

Question stats

A	5.4%
B	3.9%
C	6.2%
D	46.2%
E	38.3%

46.2% of users answered this question correctly

Session score = 0%

RCGP curriculum

15.7 - Neurological Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DVLA](#)

Neurological disorder guidelines

where indicated

**if the tumour is a benign meningioma and there is no seizure history, licence can be reconsidered 6 months after surgery if remains seizure free

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 8 of 165



A 24-year-old man who has been discharged following admission for a spontaneous pneumothorax ask for advice about flying. During his stay in hospital the pneumothorax was aspirated and a check x-ray revealed no residual air. What is the earliest time he should fly?

- A. Immediately
- B. 24 hours
- C. 3 days
- D. 2 weeks
- E. 2 months



Question stats

A	5.9%
B	7.1%
C	12.3%
D	62.6%
E	12.1%

62.6% of users answered this question correctly

Session score = 0%

Please see the text below for an explanation about the competing and changing guidelines.

Fitness to fly

The Civil Aviation Authority (CAA) has issued guidelines on air travel for people with medical conditions; please see the link provided.

Cardiovascular disease

- unstable angina, uncontrolled hypertension, uncontrolled cardiac arrhythmia, decompensated heart failure, severe symptomatic valvular disease: should not fly
- uncomplicated myocardial infarction: may fly after 7-10 days
- complicated myocardial infarction: after 4-6 weeks
- coronary artery bypass graft: after 10-14 days
- percutaneous coronary intervention: after 5 days

Respiratory disease

- pneumonia: should be 'clinically improved with no residual infection'
- pneumothorax: absolute contraindication, the CAA suggest patients may travel 2 weeks after successful drainage if there is no residual air. The British Thoracic Society used to recommend not travelling by air for a period of 6 weeks but this has now been changed to 1 week post check x-ray

Pregnancy

- most airlines do not allow travel after 36 weeks for a single pregnancy and after 32 weeks for a multiple pregnancy
- most airlines require a certificate after 28 weeks confirming that the pregnancy is progressing normally

Surgery

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Civil Aviation Authority](#)
Fitness to fly guidelines

- travel should be avoided for 10 days following abdominal surgery
- laparoscopic surgery: after 24 hours
- colonoscopy: after 24 hours
- following the application of a plaster cast, the majority of airlines restrict flying for 24 hours on flights of less than 2 hours or 48 hours for longer flights

Haematological disorders

- patients with a haemoglobin of greater than 8 g/dl may travel without problems (assuming there is no coexisting condition such as cardiovascular or respiratory disease)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 9 to 11 of 165



Theme: Consultation models

- A** Heron
- B** Byrne and Long
- C** Berne
- D** Fraser
- E** Neighbour
- F** Calgary-Cambridge
- G** Stott and Davis
- H** Helman's folk model
- I** Pendleton

For each of the following tasks select the consultation model most associated with it

9. Building the relationship



Heron

The correct answer is Calgary-Cambridge

10. Relating to patients



Heron

The correct answer is Fraser

11. Housekeeping



Heron

The correct answer is Neighbour

Question stats

Average score for registered users:

9	<div style="width: 39.9%;"></div>	39.9%
10	<div style="width: 28%;"></div>	28%
11	<div style="width: 80.8%;"></div>	80.8%

Session score = 0%

RCGP curriculum

2 - The General Practice Consultation

[Curriculum statement](#)

Consultation models

Calgary-Cambridge observation guide- Kurtz and Silverman - 1996

- initiating the session
- gathering information
- building the relationship

- giving information, explaining and planning
- closing the session

Stewart - patient-centred clinical method - 1995. 2003

- exploring both the disease and the illness experience
- understanding the whole person
- finding common ground
- incorporating prevention and health promotion
- enhancing the doctor-patient relationship
- being realistic (with time and resources)

Pendleton - The Consultation: an Approach to Learning and Teaching - 1984, 2003

- define the reason for the patient's attendance (ideas, concerns and expectations)
- consider other problems
- with the patient, choose an appropriate action for each problem
- achieve a shared understanding of the problems with the patient
- involve the patient in the management and encourage him/her to accept appropriate responsibility
- use time and resources appropriately
- establish or maintain a relationship with the patient which helps to achieve the other tasks

Fraser - Areas of competence - 1992

- interviewing and history-taking
- physical examination
- diagnosis and problem-solving
- patient management
- relating to patients
- anticipatory care
- record keeping

Neighbour - The Inner Consultation - five checkpoint model - 1987

- connecting
- summarising
- handing over
- safety netting
- housekeeping

Tuckett - meeting of two experts - 1985

- the consultation is a meeting between two experts
- doctors are experts in medicine
- patients are experts in their own illnesses
- shared understanding is the aim
- doctors should seek to understand the patient's beliefs
- doctors should address explanations in terms of the patient's belief system

Stott and Davis - Exceptional potential of the consultation - 1979

- management of presenting problems
- management of continuing problems
- modification of help-seeking behaviour
- opportunistic health promotion


Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 12 of 165



Following the introduction of revalidation, how often will doctors have to submit evidence to assess their fitness to practise?

- A. Every 2 years
- B. Every 12 months
- C. Every 3 years
-  D. Every 5 years
- E. Every 10 years

Question stats

A	3.1%
B	8.4%
C	7.3%
D	80.9%
E	0.3%

80.9% of users answered this question correctly

Session score = 0%

Revalidation

Revalidation introduces a change in the way doctors are licensed and certificated. Currently UK doctors automatically receive their licence to practise if they have paid their annual fee and have no limitations on their registration (e.g. Following a GMC ruling). To practise as a GP doctors must also be on the GP Register - a process known as certification.

Following the introduction of revalidation doctors will be required to prove their fitness to practise to allow them to continue to work as a doctor. Revalidation will occur every 5 years and in one process combine relicensing and recertification. Annual appraisals will continue as before but there will be a focus on whether the doctor is making sufficient progress towards their revalidation portfolio.

The type and amount of evidence required will be similar to that needed for appraisals currently. The RCGP is creating an ePortfolio for the process and proposes that it should contain the following (please see the link for more details):

- description of your work
- description of any special circumstances (e.g. Prolonged illness)
- details of previous appraisals
- current personal development plan
- review of previous personal development plans
- evidence of continuing professional development - at least 50 'learning credits' are required per year
- multi-source feedback
- patient questionnaire surveys
- significant event audits
- review of any formal complaints
- probity/health statements

Learning credits

- minimum of 1 credit for each hour of education
- however, if the hour of education can be shown to lead to improvements in

RCGP curriculum

3.1 - Clinical Governance

[Curriculum statement](#)

External links

[RCGP](#)

Revalidation

patient care then it will count as 2 credits

Submitting the evidence for revalidation

- the ePortfolio will be submitted electronically for review
- the review will be done by a 'Responsible Officer'
- the Responsible Officer is likely to be advised by a GP assessor and a trained lay person
- if the submitted evidence is considered sufficient the Responsible Officer will recommend to the GMC that the doctor is both relicensed and recertificated

Revalidation is due to be phased in from 2011 to 2016.


Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 13 of 165



One of your colleagues confides in you that he has just been diagnosed with hepatitis B. He has not told anyone else as he is worried he may lose his job. He is currently working as a general surgeon in the local hospital. You try to persuade him to inform occupational health but he refuses. What is the most appropriate action?

- A. Keep confidentiality but ask him to stop taking blood
- B. Send an anonymous letter to his employer
- C. Keep confidentiality
-  D. Inform your colleague's employing body
- E. Contact the police






Whilst this may seem harsh patient safety has to be paramount. Please see the updated GMC guidelines for further details.

GMC guidance: confidentiality

We will not try to replicate the extensive guidance given by the General Medical Council here. There is a link available for more detailed information.

Rate question:

Question stats

A		20.9%
B		0.7%
C		4.1%
D		74%
E		0.4%

74% of users answered this question correctly

Session score = 0%

RCGP curriculum

3.3 - Ethics and Values Based Medicine

[Curriculum statement](#)

External links

[GMC](#)

Confidentiality guidance

Question 14 of 165



Which one of the following places is it not suitable to store a controlled drug?

- A. In a doctor's bag with a combination lock
- B. In a doctor's bag with a key lock
- C. In a locked car boot
- D. In the surgery inside a locked cabinet
- E. In the surgery inside a locked safe



Question stats

A	8.2%
B	6.5%
C	82.7%
D	1.5%
E	1.1%

82.7% of users answered this question correctly

Session score = 0%

Controlled drugs: storage and register

Storage

In the surgery controlled drugs (CDs) should be stored in a locked cabinet.

Controlled drugs outside of the surgery must be stored in a locked receptacle (combination lock or key). A doctor's bag with a lock is acceptable. It should be noted that storing a controlled drug in a locked car boot is not acceptable.

Register

A register must be kept for the supply of Schedule 2 drugs.

Specific requirements of the register:

- must be bound rather than loose leaved. Computerised records are acceptable as long as they are secure and auditable
- each drug should have its own individual section
- entries should be chronological and made in indelible ink
- the following information should be recorded when receiving CDs: date, name and address of the supplier, quantity received, name, form and strength
- the following information should be recorded when supplying CDs (either to patients or practitioners): date, name and address of the person receiving the CD, person who prescribed or ordered the CD, quantity supplied, name, form and strength
- must be kept for a minimum of 2 years after the date of the last entry

For doctor's bags a separate CD register should be kept for the CD stock held within that bag. The individual doctor is responsible for the receipt and supply of CDs from their own bag.

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 15 of 165



Which one of the following patients is not entitled to free prescriptions in England?

- A. Unemployed 26-year-old man receiving the jobseeker's allowance with lower back pain
- B. 62-year-old man who is fit and well
- C. 18-year-old full-time college student with acne
- D. 36-year-old whose partner is claiming income support
- E. 58-year-old woman with Crohn's disease



Question stats

A	2.6%
B	16.7%
C	4.4%
D	25.3%
E	50.9%

50.9% of users answered this question correctly

Session score = 0%

Prescription charges

The following information applies to England. Wales has abolished prescription charges and Scotland plans to remove prescription charges altogether by 2011.

Who is entitled to free prescriptions?

- children (< 16 years old)
- aged 16, 17 or 18 and in full-time education
- elderly (aged 60 or over)
- if the patient or their partner receives: income support or jobseeker's allowance
- if the patient has a prescription exemption certificate

Prescription exemption certificate

Women who are pregnant or have had a child in the past year are entitled to free prescriptions after the issuing of a prescription exemption certificate. Patients who have the following chronic medical conditions are also entitled:

- hypoparathyroidism
- hypoadrenalism for which specific substitution therapy is essential (e.g. Addison's Disease)
- diabetes insipidus and other forms of hypopituitarism
- diabetes mellitus except where treatment is by diet alone
- myasthenia gravis
- hypothyroidism requiring thyroid hormone replacement
- epilepsy requiring continuous anti-convulsive therapy
- a permanent fistula requiring continuous surgical dressing or requiring an appliance
- undergoing treatment for cancer. This includes treatment for the effects of cancer or for the effects of cancer treatments

Pre-payment certificate

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Pre-payment certificates (PPC) are for patients not entitled to free prescriptions but who receive frequent prescriptions. They are cheaper if the patient pays for more than 14 prescriptions per year

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 16 of 165



On the Statement of Fitness for Work form which one of the following is not included as one of the tick box options?

- A. Altered hours
- B. Work place adaptations
- C. A phased return to work
- D. Amended duties
- E. Light duties



Question stats

A	8.7%
B	7.1%
C	2.9%
D	3.5%
E	77.7%

77.7% of users answered this question correctly

Session score = 0%

Statement of Fitness for Work

In 2010 sick notes became fit notes, or more formally the Statement of Fitness for Work. They have been introduced to reflect the fact that in the majority of cases patients do not need to be 100% fit before returning to work. The major change is allowing a doctor to advise that a patient 'may be fit for work taking account of the following advice'.

This information is taken from the Department of Work and Pensions website. Please see the link for further details.

Other changes

- the Statement of Fitness for Work replaces the Med3 and Med5 in one form
- the Med4, Med6 and RM 7 forms have been withdrawn due to the replacement of Incapacity Benefit with the Employment and Support Allowance
- telephone consultations are now an acceptable form of assessment
- there is no longer a box to say a patient is fit for work. There is however an option to state if you need to assess your patient's fitness for work again at the end of the statement period
- there is increased space for comments on the functional effects of the condition, including tick boxes for simple things that may help a patient back to work
- during the first 6 months of an illness the new statement can be issued for no longer than 3 months.. After this time it may be issued for an indefinite period

Things that stay the same

- can only be completed by a doctor
- you can still the advise a patient that they are not fit for work (of any type)
- the advice on the statement is not binding on employers

The statement may be issued:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Department of Work and Pensions](#)

Statement of Fitness for Work

- on the day that you assessed the patient
- on a date after you assessed your patient if you consider that it would have been reasonable to issue a statement on the day of the assessment
- after consideration of a written report from another doctor or registered health care professional

There are 4 'tick boxes' included on the form which represent common approaches to aid a return to work. One or more may be ticked. Other approaches can be suggested in the comments box. The options are:

- a phased return to work
- altered hours
- amended duties
- workplace adaptations

Patients may self-certify for the first 7 calendar days:

SC1	Self-certification, for patients not eligible to claim statutory sick pay (e.g. Unemployed or self-employed). For the first 7 calendar days of an illness
SC2	The 'standard' self-certification form, for patients eligible to claim statutory sick pay. For the first 7 calendar days of an illness

Rate question:

Question 17 of 165



Which one of the following entries on a death certificate would never be acceptable?



- A. 1a: Tuberculous meningitis. 1b: HIV infection
- B. 1a: Cardiac arrest. 2: Non-insulin dependent diabetes mellitus
- C. 1a: Intraventricular haemorrhage. 1b: Warfarin anticoagulation. 1c: Atrial fibrillation
- D. 1a: Old age. 2: Non-insulin dependent diabetes mellitus (93-year-old patient)
- E. 1a: Liver failure. 1b: Alcoholic liver disease

Cardiac arrest is a mode of dying and cannot be used unqualified on a death certificate

'Old age' is discouraged but can be used in patients greater than the age of 80 years with no qualification if certain conditions are met (please see link)

HIV and AIDS are the only acceptable abbreviations

Death certification

There is no legal definition of death in the UK although guidelines exist. Current guidance states 'death should be verified by a doctor, or other suitably qualified personnel' which means staff such as nurse practitioners may verify (but not certify) death.

After a patient has died a doctor needs to complete a medical certificate of cause of death (MCCD). There is a list of circumstances in which a doctor should notify the Coroner prior to completing the MCCD.

Some specific points on completing the MCCD:

- 'old age' as 1a is only acceptable if the patient was at least 80 years of age . It can be used if certain conditions are met but is discouraged
- 'natural causes' is not acceptable
- organ failure (e.g. 'liver failure') can only be used if you specify the disease or

condition that led to the organ failure (e.g. 1b: Hepatitis C)

- abbreviations should be avoided (except HIV and AIDS*)

The family then take the MCCD to the local Registrar of Births, Deaths, and Marriages office to register the death. If the Registrar decides that the death does not need reporting to the Coroner he/she will issue:

- certificate for Burial or Cremation
- certificate of Registration of Death (for Social Security purposes)

Question stats

A	3.9%
B	73.7%
C	3.9%
D	12.9%
E	5.6%

73.7% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Home Office](#)

Guidance for doctors completing Medical Certificates

[Ministry of Justice](#)

Cremation guidelines

- if requested. Copies of the Death Register (banks and insurance companies expect to see them)

If the family would like the burial to be outside of England, an Out of England Order is needed from the coroner.

*why this is I'm not sure - probably due to how well known the terms are amongst the general public

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 18 of 165



A 54-year-old man consults you about erectile dysfunction. Which one of the following conditions would allow a prescription of a phosphodiesterase type-5 inhibitor to be made on the NHS?

- A. Hypothyroidism
- B. Testicular cancer treated with chemotherapy
- C. Peripheral arterial disease with previous amputation
- D. Non-alcoholic liver cirrhosis
- E. Renal failure treated with dialysis



Question stats

A	6.8%
B	21.3%
C	13.9%
D	1.3%
E	56.7%

56.7% of users answered this question correctly

Session score = 0%

Part XVIII A of the Drug Tariff - The Blacklist

Theoretically any food, drug, toiletry or cosmetic may be prescribed on an NHS prescription unless the product is listed in Part XVIII A of the Drug Tariff ('the blacklist').

Medical devices (appliances) can only be prescribed on NHS prescriptions if the product is listed in Part IX of the Drug Tariff.

If a proprietary product is listed in 'the blacklist', it cannot be dispensed on the NHS. The only exception to this is if the prescription is issued using a generic name and the generic name is not itself included in the blacklist.

Some examples of 'blacklisted' products:

- Propecia (finasteride for male-pattern alopecia)
- Regaine (topical minoxidil for male-pattern alopecia)
- Calpol (see above, paracetamol suspension may be prescribed)

The Selected List

Part XVIII B of the Drug Tariff lists items that may only be prescribed for the patient groups and for the purpose listed in the Drug Tariff. Prescribers must endorse prescriptions for these products 'SLS'. This section covers the prescription of phosphodiesterase type-5 inhibitors.

For example:

- Niferex Elixir 30ml Paediatric Dropper Bottle - infants born prematurely - prophylaxis in treatment of iron deficiency
- sildenafil - only if treated prior to September 1998 or if has one of the following conditions: diabetes mellitus, Parkinson's disease, poliomyelitis, multiple sclerosis, prostate cancer, severe pelvic injury, single gene neurological disease, spina bifida, spinal cord injury, renal failure treated with dialysis or transplant, prostatectomy or radical pelvic surgery

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[NHS](#)

Electronic Drug Tariff

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 19 of 165



During a busy morning clinic the receptionists phone you. They have triaged an urgent visit request for a man with metastatic prostate cancer who is in severe pain. You are running 20 minutes behind already and are not due to finish clinic for another two hours. What is the most appropriate action?



- A. Delegate the task to the practice nurse
- B. Inform the other doctors and go and see the patient immediately
- C. Advise the patient about relaxation techniques
- D. Finish your surgery then go and see the patient
- E. Advise the patient to phone for an ambulance

Question stats

A	7.3%
B	71.9%
C	0.7%
D	5.1%
E	15%

71.9% of users answered this question correctly

Session score = 0%

This scenario looks at how urgently a patient with severe pain should be seen. In most similar scenarios, for example a patient who phones due to chest pain, the most appropriate response is phone for an ambulance. However, in the palliative setting this may not be appropriate.

The best response is therefore to go immediately and see the patient at home. Whilst this will inevitably have knock-on effects to your surgery the alternative is to leave the patient in pain.

Advising the patient to phone for an ambulance will at least get the patient seen but may not be appropriate in such an scenario.

Relaxation techniques are unlikely to be effective in the context of breakthrough pain. This is not a job for the practice nurse.

—

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Questions 20 to 22 of 165



Theme: Scoring systems used in medicine

- A Gleason score
- B Bishop score
- C Smith scale
- D CHADS2
- E ABCD2
- F DAS28
- G MMSE
- H BRIC
- I CURB-65
- J Epworth scale

Question stats

Average score for registered users:

20	<div></div>	73.6%
21	<div></div>	78.7%
22	<div></div>	50.9%

Session score = 0%

For each of the following please select the appropriate scoring system:

20. Used in the assessment of suspected obstructive sleep apnoea



Gleason score

The correct answer is Epworth scale

21. Used to determine the need to anticoagulate a patient in atrial fibrillation



Gleason score

The correct answer is CHADS2

22. Measure of disease activity in rheumatoid arthritis



Gleason score

The correct answer is DAS28

Scoring systems

There are now numerous scoring systems used in medicine. The table below lists some of the more common ones:

--	--

CHADS2	Used to determine the need to anticoagulate a patient in atrial fibrillation
ABCD2	Prognostic score for risk stratifying patients who've had a suspected TIA
NYHA	Heart failure severity scale
DAS28	Measure of disease activity in rheumatoid arthritis
Child-Pugh classification	A scoring system used to assess the severity of liver cirrhosis
Wells score	Helps estimate the risk of a patient having a deep vein thrombosis
MMSE	Mini-mental state examination - used to assess cognitive impairment
HAD	Hospital Anxiety and Depression (HAD) scale - assesses severity of anxiety and depression symptoms
PHQ-9	Patient Health Questionnaire - assesses severity of depression symptoms
GAD-7	Used as a screening tool and severity measure for generalised anxiety disorder
Edinburgh Postnatal Depression Score	Used to screen for postnatal depression
SCOFF	Questionnaire used to detect eating disorders and aid treatment
AUDIT	Alcohol screening tool
CAGE	Alcohol screening tool
FAST	Alcohol screening tool
CURB-65	Used to assess the prognosis of a patient with pneumonia
Epworth Sleepiness Scale	Used in the assessment of suspected obstructive sleep apnoea
IPSS	International prostate symptom score
Gleason score	Indicates prognosis in prostate cancer
APGAR	Assesses the health of a newborn immediately after birth
Bishop score	Used to help assess the whether induction of labour will be required
Waterlow score	Assesses the risk of a patient developing a pressure sore
FRAX	Risk assessment tool developed by WHO which calculates a patients 10-year risk of developing an osteoporosis related fracture


Can you think of any other commonly used scoring systems?

Rate question:

Question 23 of 165



Which one of the following is not a key principle of the 2005 Mental Capacity Act?

- A. An act done, or decision made, under this Act for or on behalf of a person who lacks capacity must be done, or made, in his best interests
- B. A person is not to be treated as unable to make a decision unless all practicable steps to help him to do so have been taken without success
- C. A person must be assumed to have capacity unless it is established that he lacks capacity
-  D. A person's ability to make decisions must be reviewed on an annual basis
- E. A person is not to be treated as unable to make a decision merely because he makes an unwise decision

Question stats

A	2.3%
B	4.5%
C	5%
D	77.2%
E	10.9%

77.2% of users answered this question correctly

Session score = 0%

Mental Capacity Act

The Mental Capacity Act of 2005 came into force in 2007. It applies to adults over the age of 16 and sets out who can take decisions if a patient becomes incapacitated (e.g. following a stroke). Mental capacity includes the ability to make decisions affecting daily life, healthcare and financial issues.

The Act contains 5 key principles:

- A person must be assumed to have capacity unless it is established that he lacks capacity
- A person is not to be treated as unable to make a decision unless all practicable steps to help him to do so have been taken without success
- A person is not to be treated as unable to make a decision merely because he makes an unwise decision
- An act done, or decision made, under this Act for or on behalf of a person who lacks capacity must be done, or made, in his best interests
- Before the act is done, or the decision is made, regard must be had to whether the purpose for which it is needed can be as effectively achieved in a way that is less restrictive of the person's rights and freedom of action

Assessment of capacity

The Act sets out a clear test for assessing whether a person lacks capacity. It is a 'decision-specific' and 'time-specific' test. An adult can only be considered unable to make a particular decision if:

1. He or she has an 'impairment of, or disturbance in, the functioning of the mind or brain' whether permanent or temporary AND

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

2. He or she is unable to undertake any of the following

- a. understand the information relevant to the decision
- b. retain that information
- c. use or weigh that information as part of the process of making the decision
- d. communicate the decision made by talking, sign language or other means

No individual can be labelled 'incapable' simply as a result of a particular medical condition. Section 2 of the Act makes it clear that a lack of capacity cannot be assumed by a person's age, appearance, or any condition or aspect of a person's behaviour

Best interests

The following should be considered when assessing what is in someone's best interests:

- 1. Whether the person is likely to regain capacity and can the decision wait.
- 2. How to encourage and optimise the participation of the person in the decision.
- 3. The past and present wishes, feelings, beliefs, values of the person and any other relevant factors
- 4. Views of other relevant people

Lasting Powers of Attorney (LPAs)

The Act allows a person to appoint an attorney to act on their behalf if they should lose capacity in the future, replacing the current Enduring Power of Attorney (EPA). In addition to property and financial affairs the Act also allows people to empower an attorney make health and welfare decisions. The attorney only has the authority to make decisions about life-sustaining treatment if the LPA specifies that. Before it can be used an LPA must be registered with the Office of the Public Guardian

Advance decisions

Advance decisions can be drawn up by anybody with capacity to specify treatments they would not want if they lost capacity. They may be made verbally unless they specify refusing life-sustaining treatment (e.g. Ventilation) in which case they need to be written, signed and witnessed to be valid. Advance decisions cannot demand treatment

Rate question:

Question 24 of 165


Which one of the following is not a part of the Carr-Hill allocation formula when deciding upon the global sum a Practice based in England receives?

- A. Standardised Mortality Ratio for patients < 65 years
- B. Rurality
- C. Socioeconomic group
- D. List turnover
- E. Nursing and residential home patients


Question stats

A		22.6%
B		9.6%
C		40.3%
D		20.4%
E		7.1%

40.3% of users answered this question correctly

Session score = 0%

In England the socioeconomic status of the patients is not part of the Carr-Hill formula. The additional needs calculation in Scotland is however partly based on unemployment rates and levels of deprivation

GP contract: Carr-Hill formula

The Carr-Hill allocation formula is used to adjust the global sum total for a number of local demographic and other factors which may affect Practice workload. For example, a Practice with a large number of elderly patients may have a higher workload than one which primarily cares for commuters. The Carr-Hill formula replaced the Jarman index

Factors included in the Carr-Hill formula

- age and sex of patients
- nursing and residential home patients
- list turnover: adjusted for number of new registrations
- additional needs: Standardised Mortality Ratio and Standardised Long-Standing Illness for patients under the age of 65 years
- staff market forces factor
- rurality
- London weighting

Rate question:
RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 25 of 165



The local deanery want to write a curriculum for the out-of-hours training of GP registrars. They send an initial a questionnaire to a number of local GPs and ask them what things they think should be included. Based on the results of this initial questionnaire a second questionnaire which distills the information and asks more specific questions is sent. What is this an example of?



- A. A Delphi process
- B. The Berne method
- C. Qualitative feedback method
- D. A Calgary-Cambridge process
- E. The iterative response model

Question stats

A	<div style="width: 45.8%;"></div>	45.8%
B	<div style="width: 5.1%;"></div>	5.1%
C	<div style="width: 29.8%;"></div>	29.8%
D	<div style="width: 6.1%;"></div>	6.1%
E	<div style="width: 13.2%;"></div>	13.2%

45.8% of users answered this question correctly

Session score = 0%

Delphi process

A Delphi process (also known as the Delphi method or technique) is a structured way of collecting and distilling the knowledge from a group of experts, often about issues where there is little formal evidence.

It consists of a number of 'rounds' of questionnaires. The first round tends to ask the experts a number of broad questions. The results of the first round are then sorted and common themes are distilled down. This information then goes on to form the second, more specific, questionnaire which again is sent out to the panel of experts. This iterative process is usually repeat two or three times.

Examples of where the Delphi method may be used:

- curriculum development: i.e. Involving a range of expert stakeholders in finding out what they feel should be included
- guideline development: the expert panel may include doctors, nurses, pharmacists and patients
- forecasting future health problems

One of the key features of a Delphi process is the anonymity of the participants. This prevents individual participants from dominating the opinion forming process.

Please see the link for an excellent review by Dr Thangaramtinum and Mr Redman.

RCGP curriculum

3.6 - Research and Academic Activity

[Curriculum statement](#)

External links

[RCOG](#)


The Delphi technique

Rate question:

Question 26 of 165



Which one of the following best describes the role of Caldicott guardians?

- A. Designated senior doctor who takes responsibility for elderly patients who lack capacity
- B. Monitor adherence to employment legislation in the Practice
-  C. **Protect access to confidential patient data**
- D. Protect access to controlled drugs in the Practice
- E. Designated senior doctor who takes responsibility for child protection

Caldicott guardian - protect patient data






Caldicott guardian

The 1997 Caldicott Report identified weaknesses in the way parts of NHS handled confidential patient data. The report recommended the appointment of Caldicott Guardians, a member of staff with responsibility to ensure patient data is kept secure

It is now a requirement for every NHS organisation to have a Caldicott Guardian

Rate question:

Question stats

A		7.8%
B		4.8%
C		69.2%
D		2.2%
E		15.9%

69.2% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 27 of 165



You are a GP registrar on a weekend away with a close friend and his wife. Their young child has been unwell since the morning and has now become pyrexial with an evolving purpuric rash. You have a drugs bag in the back of your car. What is the most appropriate action?

- A. Phone 999 + then contact your medical indemnity provider for advice
- B. Walk away from the situation to avoid a potential conflict of interest
- C. Phone 999 + don't give benzylpenicillin
- D. Phone 999 + ask a passerby who doesn't know the child to draw-up and give benzylpenicillin
- E. Phone 999 + give benzylpenicillin to your friend's child



Question stats

A	2.8%
B	0.2%
C	2.7%
D	0.3%
E	94.1%

94.1% of users answered this question correctly

Session score = 0%

It is normally advised that doctors should not treat themselves or close family/friends. However, this question tests whether a doctor has the professional judgement to act appropriately in an emergency situation.

Given that the child may have meningococcal septicaemia it is vital that an ambulance is called for immediately. The decision is then what to do next. As this is an emergency situation you should give treatment. Phoning your medical indemnity provider for advice will take time but it is probable you will be given advice that it is ok to give the benzylpenicillin prior to the ambulance arriving. Withholding the antibiotic is inappropriate in a child with potential meningococcal septicaemia. Giving the antibiotic to a passerby risks is inappropriate as it risks the wrong dose being given.

—

Rate question:

RCGP curriculum


4.1 - Management in Primary Care

[Curriculum statement](#)






Question 28 of 165



Which one of the following statements regarding Local Medical Committees (LMC) is true?

- A. LMCs are funded by the Department of Health
- B. LMC members are appointed by the Primary Care Trust
- C. There is one LMC per Primary Care Trust
-  D. LMC members include GP Registrars
- E. LMC policy is determined by the General Practitioners Committee

Question stats

A		9.1%
B		20.2%
C		9.9%
D		51.3%
E		9.5%

51.3% of users answered this question correctly

Session score = 0%

Local Medical Committees

Local Medical Committees (LMCs) represent the interests of GPs on a local level. They were established as part of Lloyd George's National Insurance Act in 1911 to try and ensure that GPs had a say in the running of the government's health insurance scheme. At the same time a committee was established within the British Medical Association (BMA) to represent GPs on a national level to the government. This was initially known as the Insurance Acts Committee but is now called the General Practitioners Committee (GPC) and has authority to negotiate with the government on matters such as pay and contracts. It is recognised by the Department of Health as the GP's sole negotiating body.

The GPC meets annually with the representatives of the LMCs, who may submit motions for the conference. These motions may then go on to form GPC policy.

LMCs are funded by a statutory levy on GPs. Each LMC may cover the area which corresponds to one or more Primary Care Trusts. LMC members are elected and include partners, salaried doctors and GP Registrars from both GMS and PMS practices.

RCGP curriculum

4.1 - Management in Primary Care


[Curriculum statement](#)

Rate question:






Question 29 of 165



You write a prescription for MST for a patient with metastatic breast cancer. Later in the day you receive a phone call from the local pharmacist. He has noticed that whilst you stated the total quantity to dispense in figures you failed to write it in words. Of the following options, which one is most appropriate?

- A. The pharmacist may issue one days supply at the stated dose
- B. You should complete a 'Yellow card'
- C. The prescription should be destroyed and the patient asked to make an appointment with a different doctor
-  D. The pharmacist may amend the prescription and add the total quantity in words
- E. You must wait 24 hours before issuing a further prescription

Question stats

A		17.7%
B		3.3%
C		1.6%
D		76.1%
E		1.3%

76.1% of users answered this question correctly

Session score = 0%

A pharmacist is generally not allowed to dispense unless all the information required by law is given. With Schedule 2 and 3 drugs a pharmacist is allowed to amend the prescription if 'it specifies the total quantity only in words or in figures or if it contains minor typographical errors, provided that such amendments are indelible and clearly attributable to the pharmacist making them'

Controlled drugs

When prescribing a controlled drug the following must be present on the prescription:

- name and address of the patient
- the form, and where appropriate the strength, of the preparation
- either the total quantity (in both words and figures) of the preparation, or the number (in both words and figures) of dosage units to be supplied
- the dose (cannot write 'as directed')
- prescribers name, signature, address and current date

The 2001 Misuse of Drugs Regulations act defines who is authorised to prescribe controlled drugs. It divided drugs of potential abuse into 5 categories ('schedules') each with own rules on prescribing, supply, possession, record keeping etc

Schedule 1	Cannabis, lysergide
Schedule 2	Diamorphine, morphine, pethidine, amphetamine, cocaine
Schedule 3	Barbiturates, buprenorphine, midazolam*, temazepam**
Schedule 4	Part 1: Benzodiazepines (except midazolam and temazepam) and zolpidem

RCGP curriculum

3.2 - Patient Safety

[Curriculum statement](#)

External links

[UK Government](#)

Misuse of Drugs Regulations 2001

	Part 2: Androgenic and anabolic steroids, hCG, somatropin Controlled drug prescription requirements do not apply and Schedule 4 controlled drugs are not subject to safe custody requirements
Schedule 5	Includes preparations which because of their strength are exempt from the vast majority of Controlled Drug requirements other than retention of invoices (e.g. Oramorph 10mg/5ml)

Further selected points

- Schedule 2 and 3 drugs are marked 'CD' in the BNF
- a prescription for controlled drugs in Schedules 2,3 & 4 is valid for 28 days
- a pharmacist is generally not allowed to dispense unless all the information required by law is given. With Schedule 2 and 3 drugs a pharmacist is allowed to amend the prescription if 'it specifies the total quantity only in words or in figures or if it contains minor typographical errors, provided that such amendments are indelible and clearly attributable to the pharmacist making them'

*midazolam was changed from schedule 4 to 3 in 2008

**temazepam is excluded from the prescription requirements

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

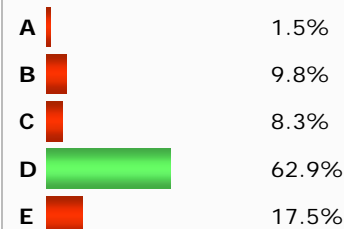
Question 30 of 165



Your surgery is selected to undergo a random visit by the Primary Care Trust (PCT) to ensure no irregularities in the Quality and Outcomes Framework reporting. Who will be on the routine PCT visiting team?

- A. GP + NHS counter-fraud auditor
- B. PCT management representative + NHS counter-fraud auditor + patient representative
- C. PCT management representative + NHS counter-fraud auditor
- ✓ D. **PCT management representative + GP + patient representative**
- E. PCT management representative + NHS counter-fraud auditor + GP

Question stats



62.9% of users answered this question correctly

Session score = 0%

Quality and Outcomes Framework

The Quality and Outcomes Framework (QOF) is the annual reward and incentive programme detailing GP practice achievement results. It was introduced as part of the new General Medical Services (GMS) to incentivise not only the management of chronic disease such as diabetes but also to improve the organisation of the practice and patient experience

Other points

- for clinical indicators the value of a point is determined by the prevalence of that condition in the practice
- participation in the QOF is voluntary
- 5% of practices should be visited at random to help prevent fraud. The PCT visiting team will normally consist of a PCT management representative, a GP and a patient representative

The table below shows the four key areas on which the QOF is based

Clinical indicators	697 points	Standards linked to the care of patients suffering from chronic diseases
Organisational	167.5 points	Standards relating to records and information, communicating with patients, education and training, medicines management and clinical and practice management
Additional services	44 points	Covering cervical screening, child health surveillance, maternity services and contraceptive services
Patient experience	91.5 points	Based on patient surveys and length of consultations

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Patients may be 'exception reported' in the following situations:

- patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the preceding 12 months
- patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances e.g. Terminal illness, extreme frailty
- patients newly diagnosed within the practice or who have recently registered with the practice, who should have measurements made within 3 months and delivery of clinical standards within 9 months e.g. Blood pressure or cholesterol measurements within target levels
- patients who are on maximum tolerated doses of medication whose treatment remain sub-optimal
- patients for whom prescribing a medication is not clinically appropriate e.g. Those who have an allergy, another contraindication or have experienced an adverse reaction
- where a patient has not tolerated medication
- where a patient does not agree to investigation or treatment (informed dissent), and this has been recorded in their medical records
- where the patient has a supervening condition which makes treatment of their condition inappropriate e.g. Cholesterol reduction where the patient has liver disease
- where an investigative service or secondary care service is unavailable

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 31 to 33 of 165



Theme: Benefits

- A Bereavement Allowance
- B Bereavement Payment
- C Statutory Sick Pay
- D Disability Living Allowance
- E Employment and Support Allowance
- F State pension
- G Income Support
- H Job Seekers Allowance
- I No benefits claimable

For each of the following scenarios select the claimable benefit

31. 62-year-old woman who works as a cleaner



Bereavement Allowance

The correct answer is State pension

The state pension is claimable even if the person is still working.

32. 45-year-old bank clerk who has not been working for the past 3 months due to depression



Bereavement Allowance

The correct answer is Statutory Sick Pay

33. A 20-year-old single mother who works 12 hours a week as a waitress



Bereavement Allowance

The correct answer is Income Support

As she is working less than 16 hours per week and on a low income she is entitled to income support

Question stats

Average score for registered users:

31	<div></div>	65.1%
32	<div></div>	71.5%
33	<div></div>	80.1%

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Benefits

Whilst GPs are not supposed to be experts on claimable benefits, a rough understanding is expected

Income support	Aged 16-59 years, on low income, working less than 16 hours per week and not receiving Job Seekers Allowance
Job Seekers Allowance	From 19 years old to state pension age. Claimants must be capable of working and agree to actively seek work
Disability Living Allowance	Tax-free benefit for children and adults who need help with personal care or have walking difficulties because they are physically or mentally disabled
Statutory Sick Pay	For employees unable to work due to illness. Unable to work for > 4 days in a row. Paid up to a maximum of 28 weeks
Incapacity Benefit & Employment and Support Allowance	Employment and Support Allowance replaced Incapacity Benefit for new claimants from October 2008. Claimable by those not entitled to Statutory Sick Pay (SSP), for example self-employed, or when SSP has ended
Retirement pension	State pension may be claimed from 60 years for women and 65 years for men. State pensions are taxable and paid even if the claimant is still working
Bereavement payment	Lump sum given to spouse if they are under state pension age when their partner died Depends on national insurance contributions Not payable to divorcees
Bereavement allowance	Taxable weekly benefit paid to the spouse for up to 52 weeks from the date of death, if the surviving partner is 45 years or older and less than the state pension age
Health in Pregnancy Grant	Payable to pregnant women between the 25th week of pregnancy and expected date of delivery. One-off lump sum, patients need form signing by midwife or doctor. Due to be scrapped from the 1st January 2011.

Rate question:

Question 35 of 165



Which one of the following reports provides details on the prescribing habits of practices?

- A. PPAMR
- B. GPPR
- C. **PACT**
- D. PCER
- E. GP-PPA-R



Question stats

A	<div></div>	16.5%
B	<div></div>	19.2%
C	<div></div>	50%
D	<div></div>	7.7%
E	<div></div>	6.6%

50% of users answered this question correctly

Session score = 0%

PACT

PACT stands for **P**rescribing **A**nalysis and **C**ost **T**abulation or **P**rescribing **A**nalysis and **C**os**T** . It is a document issued to each GP practice giving a summary of prescribing patterns.

- generic versus brand prescribing
- number of items dispensed (categorised as per BNF)
- information is available at individual practice level, health authority level, and national level, allowing different analyses

It is generated by the Prescription Pricing Authority (PPA)

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 36 of 165



A 44-year-old woman present to the GP surgery for a blood pressure check. You notice she has multiple bruises on her arms. She tells you there have been 'some problems at home' but doesn't want the police involved. What is the most appropriate action?



- A. Give her the details of a domestic violence support group
- B. Tell her that you have no alternative but to contact the police
- C. Check her FBC and clotting
- D. Draw a detailed diagram of her injuries + refer her for counselling
- E. Phone the partner after the patient as left and warn him of further action if he doesn't stop

Question stats

A	<div style="width: 83.6%;"></div>	83.6%
B	<div style="width: 2.4%;"></div>	2.4%
C	<div style="width: 3.4%;"></div>	3.4%
D	<div style="width: 10.4%;"></div>	10.4%
E	<div style="width: 0.1%;"></div>	0.1%

83.6% of users answered this question correctly

Session score = 0%

Scenarios involving domestic violence can be difficult to deal with.

The people who are most likely to be able to offer practical advice are domestic violence support groups. They will have specific knowledge of housing and financial issues. A general counselling service is less able to provide this support and may imply to the women that you feel she is at fault. As she is reluctant for police involvement at this stage drawing a diagram of her injuries is less relevant although it is still good practice.

Checking her bloods is unlikely to be relevant – her bruises are likely to be a result of violence by her partner.

Unless you feared for the patient's life this is not a situation where you would break confidentiality. It is possible such action may put the woman at more risk of violence.

Phoning the partner directly is the worst option as this both breaks confidentiality and is likely to put the patient at risk of retribution.

—

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 37 of 165



A 69-year-old man presents to surgery. He states he is unhappy that Dr Jones, one of your colleagues at the surgery, took so long diagnosing his wife with Parkinson's disease. What is the most appropriate response?



- A. Advise him to speak to Dr Jones directly
- B. Reassure him that an early diagnosis would not have altered his wife's prognosis
- C. Advise him to publicise his concerns in the local paper
- D. Advise him to contact the Health Service Ombudsman
- E. Advise him to make a written complaint to the surgery

When patients or their relatives feel that they have received inadequate care the first step is to try and achieve local resolution. Speaking to the health care professionals involved can often resolve any misunderstandings. If this does not resolve the issue the next step is for the patient or family to make a formal written complaint.

If local resolution fails then the next step is to involve a more central body such as the Health Service Ombudsman. All complaints should be acknowledged and not played down, regardless of whether it has altered a patient's long-term prognosis.

Advising a patient to contact the local paper is not likely to result in a resolution to the situation.

—

Rate question:

Question stats

A	<div style="width: 63.5%;"></div>	63.5%
B	<div style="width: 9.6%;"></div>	9.6%
C	<div style="width: 0.3%;"></div>	0.3%
D	<div style="width: 0.7%;"></div>	0.7%
E	<div style="width: 26%;"></div>	26%

63.5% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 38 of 165



Which one of the following statements regarding practice based commissioning (PBC) is incorrect?



- Any savings made through PBC is an extra source of income for partners
- The PCT will be responsible for placing and managing contracts
- The PCT will continue to hold the actual funds for commissioning
- Practices are encouraged to form commissioning groups
- Devolves responsibility for commissioning services from Primary Care Trusts (PCTs) to GPs

Savings made through PBC can only be spent on patient services and 'should be used to improve clinical services in a substantial way'

Practice based commissioning

Practice based commissioning (PBC) is a Department of Health (DoH) initiative to 'engage practices and other primary care professionals in the commissioning of services'. It is also hoped that with PBC 'front line clinicians are being provided with the resources and support to become more involved in commissioning decisions'.

In real terms this means devolving responsibility for commissioning services from Primary Care Trusts (PCTs) to local GP practices in a hope to save money. Ultimately practices would be given a budget for commissioning services. This will involve:

- identifying patient needs
- designing effective and appropriate health service responses to those needs
- allocating resources against competing service priorities

The actual financial implications for practices are complicated. The budget will be an 'indicative' budget only. The PCT will continue to hold the actual funds and will still be responsible for placing and managing contracts. If a practice overspends their indicative budget they will be expected to make a saving over the following years to achieve an overall balance. If practices join together into commissioning groups they would be able to 'spread the risk' and be less vulnerable to random fluctuations in activity.

Savings made through PBC can only be spent on patient services and 'should be used to improve clinical services in a substantial way'

Potential disadvantages

- increased bureaucracy for GPs
- conflict of interest: GPs may have perverse incentives to avoid taking on 'costly' patients or under-refer or under-prescribe

Question stats

A	<div></div>	58%
B	<div></div>	11.8%
C	<div></div>	9.2%
D	<div></div>	5.7%
E	<div></div>	15.4%

58% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 39 of 165



When revalidation is introduced, how will GPs be assessed?



- A. Appraiser will perform assessment every 5 years
- B. Visit to your usual place of work by two GPs who have been trained as assessors
- C. **Submission of an electronic portfolio for review by a Responsible Officer**
- D. Submission of an electronic portfolio for review by a panel of GPs (ideally from the local area)
- E. Interview with a panel of assessors including a GP and a lay person, similar to the current RITA process

Question stats

A		29.6%
B		1.5%
C		55.9%
D		8.5%
E		4.5%

55.9% of users answered this question correctly

Session score = 0%

Revalidation

Revalidation introduces a change in the way doctors are licensed and certificated. Currently UK doctors automatically receive their licence to practise if they have paid their annual fee and have no limitations on their registration (e.g. Following a GMC ruling). To practise as a GP doctors must also be on the GP Register - a process known as certification.

Following the introduction of revalidation doctors will be required to prove their fitness to practise to allow them to continue to work as a doctor. Revalidation will occur every 5 years and in one process combine relicensing and recertification. Annual appraisals will continue as before but there will be a focus on whether the doctor is making sufficient progress towards their revalidation portfolio.

The type and amount of evidence required will be similar to that needed for appraisals currently. The RCGP is creating an ePortfolio for the process and proposes that it should contain the following (please see the link for more details):

- description of your work
- description of any special circumstances (e.g. Prolonged illness)
- details of previous appraisals
- current personal development plan
- review of previous personal development plans
- evidence of continuing professional development - at least 50 'learning credits' are required per year
- multi-source feedback
- patient questionnaire surveys
- significant event audits
- review of any formal complaints
- probity/health statements

Learning credits

RCGP curriculum

3.1 - Clinical Governance

[Curriculum statement](#)

External links

[RCGP](#)

Revalidation

- minimum of 1 credit for each hour of education
- however, if the hour of education can be shown to lead to improvements in patient care then it will count as 2 credits

Submitting the evidence for revalidation

- the ePortfolio will be submitted electronically for review
- the review will be done by a 'Responsible Officer'
- the Responsible Officer is likely to be advised by a GP assessor and a trained lay person
- if the submitted evidence is considered sufficient the Responsible Officer will recommend to the GMC that the doctor is both relicensed and recertificated

Revalidation is due to be phased in from 2011 to 2016.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 40 of 165



Which one of the following statements regarding Disability Living Allowance (DLA) is incorrect?



- A. Is for patients under the age of 65 years
- B. Has three components - care, mobility and housing
- C. Is tax-free
- D. Is not means tested
- E. Patients should normally be likely to need help for at least a further 6 months

Disability Living Allowance has two components - care and mobility

Benefits: chronic illness and cancer patients

Patients who have a chronic illness or cancer, which results in a disability severe enough to need help with caring for themselves, are entitled to claim the following benefits:

- Disability Living Allowance: for patients under the age of 65 years
- Attendance Allowance: for patients over aged 65 years and over

Disability Living Allowance

Disability Living Allowance (DLA) can be claimed by patients who normally have needed help for at least 3 months and be likely to need it for at least a further 6 months. It is tax-free, not means tested and divided into two components:

- Care component
- Mobility component

Attendance Allowance

Attendance Allowance (AA) is a tax-free allowance for people aged 65 or over when they claim who need help with their personal care. To claim AA patients should normally have needed help with care for 6 months. Like DLA it is not means tested

Terminally ill patients

Patients who have a terminal illness (where there is an expectation that the patient will not live for more than 6 months) are eligible to be fast-tracked through the system for claiming DLA or AA. A **DS1500** form is completed which ensures the application is dealt with promptly and that the patient automatically receives the higher rate

Rate question:

Question stats

A	<div style="width: 11.7%;"></div>	11.7%
B	<div style="width: 58%;"></div>	58%
C	<div style="width: 5.9%;"></div>	5.9%
D	<div style="width: 15.2%;"></div>	15.2%
E	<div style="width: 9.3%;"></div>	9.3%

58% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 41 of 165



Of the following scenarios, which one would indicate it was inappropriate for the patient to take an airline flight?



- A 54-year-old woman who had a laparoscopic cholecystectomy 5 days ago
- A 17-year-old flying back to the UK who broke his leg whilst skiing in Canada. Had a plaster cast applied 24 hours ago
- A 59-year-old man who had a colonoscopy 2 days ago
- A 62-year-old man who had an uncomplicated myocardial infarction 3 weeks ago
- A woman who is 27-weeks pregnant with twins

Question stats

A		9.7%
B		73%
C		1.7%
D		8.5%
E		7.2%

73% of users answered this question correctly

Session score = 0%

Following the application of a plaster cast patients should wait 24 hours before short flights (< 2 hours) and 48 hours before longer flights. This is due to the fact that air may be trapped beneath the cast

Fitness to fly

The Civil Aviation Authority (CAA) has issued guidelines on air travel for people with medical conditions; please see the link provided.

Cardiovascular disease

- unstable angina, uncontrolled hypertension, uncontrolled cardiac arrhythmia, decompensated heart failure, severe symptomatic valvular disease: should not fly
- uncomplicated myocardial infarction: may fly after 7-10 days
- complicated myocardial infarction: after 4-6 weeks
- coronary artery bypass graft: after 10-14 days
- percutaneous coronary intervention: after 5 days

Respiratory disease

- pneumonia: should be 'clinically improved with no residual infection'
- pneumothorax: absolute contraindication, the CAA suggest patients may travel 2 weeks after successful drainage if there is no residual air. The British Thoracic Society used to recommend not travelling by air for a period of 6 weeks but this has now been changed to 1 week post check x-ray

Pregnancy

- most airlines do not allow travel after 36 weeks for a single pregnancy and after 32 weeks for a multiple pregnancy
- most airlines require a certificate after 28 weeks confirming that the pregnancy is progressing normally

External links

[Civil Aviation Authority](#)

Fitness to fly guidelines

Surgery

- travel should be avoided for 10 days following abdominal surgery
- laparoscopic surgery: after 24 hours
- colonoscopy: after 24 hours
- following the application of a plaster cast, the majority of airlines restrict flying for 24 hours on flights of less than 2 hours or 48 hours for longer flights

Haematological disorders

- patients with a haemoglobin of greater than 8 g/dl may travel without problems (assuming there is no coexisting condition such as cardiovascular or respiratory disease)

Rate question:

Questions 42 to 44 of 165



Theme: DVLA: drug and alcohol misuse

- A** No need to notify DVLA
- B** Notify DVLA but can continue to drive
- C** Cannot drive unless controlled for 3 months
- D** Cannot drive unless controlled for 6 months
- E** Cannot drive unless controlled for 9 months
- F** Cannot drive unless controlled for 12 months
- G** Cannot drive unless controlled for 18 months

For each of the following scenarios select the most appropriate advice regarding driving a car:

- 42.** A 23-year-old man who smokes cannabis every day. On further discussion he says he never smokes before driving.



No need to notify DVLA

The correct answer is Cannot drive unless controlled for 6 months

- 43.** A 45-year-old woman who is a self-confessed alcoholic. She drinks around 90 units per week and often drinks in the morning.



No need to notify DVLA

The correct answer is Cannot drive unless controlled for 12 months

- 44.** A 29-year-old publican who drinks around 80 units per week. He denies having a drinking problem but says he drinks to relax and never before driving. His MCV and gamma-GT and mildly elevated.



No need to notify DVLA

The correct answer is Cannot drive unless controlled for 6 months

This behaviour would be classified as alcohol misuse by the DVLA

Question stats

Average score for registered users:

42		30.2%
43		43.6%
44		32.2%

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DVLA](#)

DVLA guidelines

DVLA: drug and alcohol misuse

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Alcohol misuse*

- 'persistent alcohol misuse, confirmed by medical enquiry and/or by evidence of otherwise unexplained abnormal blood markers, requires licence revocation or refusal until a minimum **6 month** period of controlled drinking or abstinence has been attained, with normalisation of blood parameters'

Alcohol dependency

- as above but **1 year**

Cannabis, amphetamines, ecstasy, LSD

- 'persistent use of or dependency on these substances, confirmed by medical enquiry, will lead to licence refusal or revocation for a minimum **6 month** period free of such use has been attained. Independent medical assessment and urine screen arranged by DVLA, may be required'

Heroin, cocaine, methadone

- as above but **1 year**, also consultant report may be required on reapplication

*this is defined by the DVLA as 'a state which, because of consumption of alcohol, causes disturbance of behaviour, related disease or other consequences, likely to cause the patient, his/her family or society harm now, or in the future, and which may or may not be associated with dependency'

Rate question:

Question 45 of 165



How long should a patient stop driving for following a stroke?



- A. No restriction unless physical/visual impairment
- B. 1 month
- C. 3 month
- D. 6 months
- E. 12 months

DVLA advice post stroke or TIA: cannot drive for 1 month

Question stats

A	4.5%
B	78.5%
C	6.4%
D	7.2%
E	3.4%

78.5% of users answered this question correctly

Session score = 0%

DVLA: neurological disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Specific rules

- first seizure: 6 months off driving*. For patients with established epilepsy they must be fit free for 12 months before being able to drive
- stroke or TIA: 1 month off driving
- multiple TIAs over short period of times: 3 months off driving
- craniotomy e.g. For meningioma: 1 year off driving**
- pituitary tumour: craniotomy: 6 months; trans-sphenoidal surgery 'can drive when there is no debarring residual impairment likely to affect safe driving'
- narcolepsy/cataplexy: cease driving on diagnosis, can restart once 'satisfactory control of symptoms'

Syncope

- simple faint: no restriction
- unexplained, low risk of recurrence: 4 weeks off
- explained and treated: 4 weeks off
- unexplained: 6 months off

*previously rule was 12 months. It is now 6 months off driving if the licence holder has undergone assessment by an appropriate specialist and no relevant abnormality has been identified on investigation, for example EEG and brain scan where indicated

**if the tumour is a benign meningioma and there is no seizure history, licence

RCGP curriculum

15.7 - Neurological Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DVLA](#)

Neurological disorder guidelines

can be reconsidered 6 months after surgery if remains seizure free

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 46 of 165



When prescribing the following drugs, which one requires the prescription to state the total quantity in both words and figures?

- A. Oral zolpidem
- B. Oral diazepam
- C. Oral risperidone
- D. Subcutaneous somatropin
- E. **Buccal midazolam**



The legal status of midazolam changed in January 2008 to a Schedule 3 controlled drug

Controlled drugs

When prescribing a controlled drug the following must be present on the prescription:

- name and address of the patient
- the form, and where appropriate the strength, of the preparation

- either the total quantity (in both words and figures) of the preparation, or the number (in both words and figures) of dosage units to be supplied

- the dose (cannot write 'as directed')
- prescribers name, signature, address and current date

The 2001 Misuse of Drugs Regulations act defines who is authorised to prescribe controlled drugs. It divided drugs of potential abuse into 5 categories ('schedules') each with own rules on prescribing, supply, possession, record keeping etc

Schedule 1	Cannabis, lysergide
Schedule 2	Diamorphine, morphine, pethidine, amphetamine, cocaine
Schedule 3	Barbiturates, buprenorphine, midazolam*, temazepam**
Schedule 4	<p>Part 1: Benzodiazepines (except midazolam and temazepam) and zolpidem</p> <p>Part 2: Androgenic and anabolic steroids, hCG, somatropin</p> <p>Controlled drug prescription requirements do not apply and Schedule 4 controlled drugs are not subject to safe custody requirements</p>
Schedule 5	Includes preparations which because of their strength are exempt from the vast majority of Controlled Drug requirements other than retention of

Question stats

A		8.5%
B		12.9%
C		2%
D		10.5%
E		66%

66% of users answered this question correctly

Session score = 0%

RCGP curriculum

3.2 - Patient Safety

[Curriculum statement](#)

External links

[UK Government](#)

Misuse of Drugs Regulations 2001

invoices (e.g. Oramorph 10mg/5ml)

Further selected points

- Schedule 2 and 3 drugs are marked 'CD' in the BNF
- a prescription for controlled drugs in Schedules 2,3 & 4 is valid for 28 days
- a pharmacist is generally not allowed to dispense unless all the information required by law is given. With Schedule 2 and 3 drugs a pharmacist is allowed to amend the prescription if 'it specifies the total quantity only in words or in figures or if it contains minor typographical errors, provided that such amendments are indelible and clearly attributable to the pharmacist making them'

*midazolam was changed from schedule 4 to 3 in 2008

**temazepam is excluded from the prescription requirements

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 47 of 165



Which one of the following IT systems calculates how well a practice is doing in meeting the Quality and Outcomes Framework (QOF) targets and hence determines a practices QOF income?

- A. QOFSR
- B. QOF-SNOMED
- C. Qsys
- D. QMAS
- E. PRODIGY



Question stats

A	<div></div>	7.9%
B	<div></div>	34.3%
C	<div></div>	2.3%
D	<div></div>	42.1%
E	<div></div>	13.3%

42.1% of users answered this question correctly

Session score = 0%

QMAS

The Quality Management and Analysis System (QMAS) is a national IT programme which provides practices and primary care trusts with information on how well individual practices are meeting the Quality and Outcomes Framework (QOF) targets. QMAS calculates a points score which will determine a practices QOF income

RCGP curriculum

4.2 - Information Management and Technology

[Curriculum statement](#)

Rate question:

Question 48 of 165



A 20-year-old student from India asks to register at the surgery. Which one of the following is correct?

- A. He cannot register unless he has already lived for more than 6 months in the UK
- B. He cannot register unless he has already lived for more than 12 months in the UK
- C. He is not entitled to NHS primary care but should be advised to attend A&E if acutely unwell
- D. He cannot register unless he plans to live in the UK for more than 12 months
- E. **He cannot register unless he plans to live in the UK for more than 6 months**



Question stats

A	6.4%
B	0.6%
C	6.7%
D	4.5%
E	81.8%

81.8% of users answered this question correctly

Session score = 0%

NHS treatment eligibility

Primary care

People are eligible for primary care if they are 'ordinarily resident' in the UK. Contrary to popular belief it is not related to National Insurance contributions or nationality. This generally means they will be in the UK for at least 6 months but it should be noted that there is no qualifying period (i.e. People are entitled to care if they expect to be in the UK for 6 months). This would exclude people who have emigrated but return every so often for free NHS care. Refugees are regarded as ordinarily resident.

Secondary care

The following hospital treatment is free of charge for everyone who needs it, regardless of how long they have been or intend to stay in the UK:

- contraception
- accident and emergency department treatment (excludes emergency treatment given elsewhere in the hospital)
- compulsory psychiatric treatment
- treatment for certain communicable diseases, e.g. Tuberculosis, malaria and meningitis. Testing for HIV is free of charge, but any subsequent treatment may have to be paid for

Visitors can receive NHS hospital treatment free of charge if the need for treatment arose during their visit to the UK and:

- person is a national of an European Economic Area (EEA) country* or Switzerland
- person normally lives abroad, and is receiving a UK state pension, and has

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Department of Health](#)

Eligibility for free hospital treatment under the NHS

- lived in the UK in the past for at least ten years
- person has lived in the UK for at least ten years in the past, but now lives in an EEA state, or in a non-EEA state with which the UK has a reciprocal agreement
- person is a national, or a resident of certain non-EEA countries, with which the UK has a reciprocal agreement.

*European Union countries plus Liechtenstein, Iceland and Norway

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 49 of 165



Which one of the following statements regarding GP contracts is true?



- A. PMS practices receive a Minimum Practice Income Guarantee (MPIG)
- B. PMS practices may take part in the QOF scheme
- C. Doctors in GMS practices tend to earn more than those in PMS practices
- D. The majority of practices are PMS
- E. The GMS contract is locally negotiated

Question stats

A	<div></div>	14.9%
B	<div></div>	55.1%
C	<div></div>	8%
D	<div></div>	5.9%
E	<div></div>	16.1%

55.1% of users answered this question correctly

Session score = 0%

GP contract: comparison

The table below summarises some of the basic differences the General Medical Services (GMS), Personal Medical Services (PMS) and Alternative Provider Medical Services contracts:

	GMS	PMS	APMS
Who can provide services?	GP / qualifying health professional or company 100% owned by qualifying persons	GP / qualifying health professional or company 100% owned by qualifying persons	No restriction of providers
Contract - negotiation	Nationally negotiated	Locally negotiated with mandatory terms	Locally negotiated with mandatory terms
Contract - scope	Essential services (e.g. day-to-day care) with optional additional services (e.g. Minor surgery) and enhanced services	Core and additional services (similar to GMS)	Depends on individual contract
Contract - type	Open-ended which cannot be terminated unless fault proven	Usually for five years, contract may be terminated	Usually for three years, contract may be terminated
Payment	Global sum with Minimum Practice Income Guarantee (MPIG), QOF, enhanced services, premises, IT	Baseline set nationally, QOF	Locally negotiated
General	The majority of practices are	GPs in PMS tend to	

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

	GMS	have higher incomes	
--	-----	---------------------	--

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 50 of 165



Which one of the following is not an integral part of clinical governance?



- A. Health promotion
- B. Clinical audit
- C. Risk management
- D. Clinical effectiveness
- E. Education and training of staff

Health promotion is obviously important but is not under the remit of clinical governance

Clinical governance

Clinical governance may be defined as 'the system through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care, by creating an environment in which clinical excellence will flourish'

It comprises a number of elements:

- education and training
- clinical audit
- clinical effectiveness
- research and development
- risk management
- openness

Rate question:

Question stats

A	<div style="width: 76.6%;"></div>	76.6%
B	<div style="width: 1.8%;"></div>	1.8%
C	<div style="width: 6.3%;"></div>	6.3%
D	<div style="width: 8.4%;"></div>	8.4%
E	<div style="width: 7%;"></div>	7%

76.6% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 51 of 165



A friend of yours who is a doctor asks you to prescribe him a course of ciprofloxacin as he is going to Goa on holiday in three days time. What is the most appropriate action?



- A. Inform the GMC of his conduct
- B. **Decline and suggest he consults with his regular GP**
- C. Briefly ascertain any past medical history and advise him that taking ciprofloxacin is not normally recommended
- D. Prescribe the ciprofloxacin for him
- E. Advise him to go to A&E for a prescription

The GMC have the following to say on prescribing to people you know:
'Doctors should, wherever possible, avoid treating themselves or anyone with whom they have a close personal relationship and should be registered with a GP outside their family.'

Therefore the best option is to advise him to see his own GP. Getting into a discussion about his past medical history is problematic as it blurs the boundaries of being a doctor or a friend. Advising him to go to A&E is a poor option as it is neither an accident nor an emergency.

This is not an uncommon request from colleagues, therefore informing the GMC seems very harsh.

—

Rate question:

Question stats

A	0.4%
B	89.1%
C	7.2%
D	2.5%
E	0.8%

89.1% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 52 of 165



Which one of the following statements regarding the Statement of Fitness for Work is correct?



- A. The statement can no longer be used for benefit purposes
- B. It may be completed by a registered Nurse Practitioner
- C. **It may be completed following a telephone consultation in the first instance**
- D. Replaces the old Med4 and Med6 forms
- E. Includes an option to state that the patient is fit to return to work

Question stats

A	2.8%
B	3.2%
C	59.9%
D	8.5%
E	25.6%

59.9% of users answered this question correctly

Session score = 0%

Statement of Fitness for Work

In 2010 sick notes became fit notes, or more formally the Statement of Fitness for Work. They have been introduced to reflect the fact that in the majority of cases patients do not need to be 100% fit before returning to work. The major change is allowing a doctor to advise that a patient 'may be fit for work taking account of the following advice'.

This information is taken from the Department of Work and Pensions website. Please see the link for further details.

Other changes

- the Statement of Fitness for Work replaces the Med3 and Med5 in one form
- the Med4, Med6 and RM 7 forms have been withdrawn due to the replacement of Incapacity Benefit with the Employment and Support Allowance
- telephone consultations are now an acceptable form of assessment
- there is no longer a box to say a patient is fit for work. There is however an option to state if you need to assess your patient's fitness for work again at the end of the statement period
- there is increased space for comments on the functional effects of the condition, including tick boxes for simple things that may help a patient back to work
- during the first 6 months of an illness the new statement can be issued for no longer than 3 months.. After this time it may be issued for an indefinite period

Things that stay the same

- can only be completed by a doctor
- you can still the advise a patient that they are not fit for work (of any type)
- the advice on the statement is not binding on employers

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Department of Work and Pensions](#)

Statement of Fitness for Work

The statement may be issued:

- on the day that you assessed the patient
- on a date after you assessed your patient if you consider that it would have been reasonable to issue a statement on the day of the assessment
- after consideration of a written report from another doctor or registered health care professional

There are 4 'tick boxes' included on the form which represent common approaches to aid a return to work. One or more may be ticked. Other approaches can be suggested in the comments box. The options are:

- a phased return to work
- altered hours
- amended duties
- workplace adaptations

Patients may self-certify for the first 7 calendar days:

SC1	Self-certification, for patients not eligible to claim statutory sick pay (e.g. Unemployed or self-employed). For the first 7 calendar days of an illness
SC2	The 'standard' self-certification form, for patients eligible to claim statutory sick pay. For the first 7 calendar days of an illness

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 53 to 55 of 165



Theme: DVLA: cardiovascular disorders

- A** No restriction
- B** 1 week off driving
- C** 2 weeks off driving
- D** 4 weeks off driving
- E** 6 weeks off driving
- F** 2 months off driving
- G** 3 months off driving
- H** No restriction but inform DVLA

For each of the following scenarios select the most appropriate advice regarding driving a car:

53. A 71-year-old man has just had a permanent pacemaker insertion



No restriction

The correct answer is 1 week off driving

54. A 61-year-old man has an uneventful coronary artery bypass graft



No restriction

The correct answer is 4 weeks off driving

55. An implantable cardioverter-defibrillator has just been inserted into a patient with hypertrophic obstructive cardiomyopathy who has never had a ventricular arrhythmia



No restriction

The correct answer is 4 weeks off driving

Question stats

Average score for registered users:

53		61.4%
54		64.6%
55		33.3%

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DVLA](#)

Cardiovascular disorder guidelines

DVLA: cardiovascular disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Specific rules

- angioplasty (elective) - 1 week off driving
- CABG - 4 weeks off driving
- acute coronary syndrome- 4 weeks off driving, 1 week if successfully treated by angioplasty
- angina - driving must cease if symptoms occur at rest/at the wheel
- pacemaker insertion - 1 week off driving
- implantable cardioverter-defibrillator: if implanted for sustained ventricular arrhythmia: cease driving for 6 months. If implanted prophylactically then cease driving for 1 month
- successful catheter ablation for an arrhythmia- 2 days off driving
- aortic aneurysm of 6cm or more - notify DVLA. Licensing will be permitted subject to annual review. An aortic diameter of 6.5 cm or more disqualifies patients from driving
- heart transplant: DVLA do not need to be notified

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 56 of 165



How long is bereavement allowance paid for following the death of a spouse?

- A. 3 months from the date of death
- B. 6 months from the date of death
- C. 12 months from the date of death
- D. 18 months from the date of death
- E. 24 months from the date of death



Question stats

A	5.5%
B	13.9%
C	75%
D	2.6%
E	2.9%

75% of users answered this question correctly

Session score = 0%

Benefits: bereavement

Whilst GPs are not supposed to be experts on claimable benefits, a rough understanding is expected

Funeral payment	One-off payment to the partner or parent of the deceased if they are on benefits to help pay for a funeral
Bereavement payment	Lump sum given to spouse if they are under the state pension age when their partner died Depends on national insurance contributions Not payable to divorcees
Bereavement allowance	Taxable weekly benefit paid to the spouse for up to 52 weeks from the date of death, if the surviving partner is 45 years or older and less than the state pension age
Widowed Parent's Allowance	Payable to a parent whose husband or wife has died. Eligibility <ul style="list-style-type: none"> surviving partner is bringing up a child < 19 years of age and receiving child benefit deceased partner had made adequate national insurance contributions also if the woman was expecting her late husband's baby divorcees and those who remarry and not eligible to claim

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DirectGov](#)

Bereavement benefits

Rate question:

Question 57 of 165



Which one of the following medical conditions does not allow a patient to apply for a prescription exemption certificate?



- A. Psoriasis
- B. Addison's Disease
- C. Diabetes insipidus
- D. Myasthenia gravis
- E. Hypoparathyroidism

Question stats

A	<div style="width: 85.2%;"></div>	85.2%
B	<div style="width: 1.2%;"></div>	1.2%
C	<div style="width: 5.5%;"></div>	5.5%
D	<div style="width: 2.7%;"></div>	2.7%
E	<div style="width: 5.3%;"></div>	5.3%

85.2% of users answered this question correctly

Session score = 0%

Prescription charges

The following information applies to England. Wales has abolished prescription charges and Scotland plans to remove prescription charges altogether by 2011.

Who is entitled to free prescriptions?

- children (< 16 years old)
- aged 16, 17 or 18 and in full-time education
- elderly (aged 60 or over)
- if the patient or their partner receives: income support or jobseeker's allowance
- if the patient has a prescription exemption certificate

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Prescription exemption certificate

Women who are pregnant or have had a child in the past year are entitled to free prescriptions after the issuing of a prescription exemption certificate. Patients who have the following chronic medical conditions are also entitled:

- hypoparathyroidism
- hypoadrenalism for which specific substitution therapy is essential (e.g. Addison's Disease)
- diabetes insipidus and other forms of hypopituitarism
- diabetes mellitus except where treatment is by diet alone
- myasthenia gravis
- hypothyroidism requiring thyroid hormone replacement
- epilepsy requiring continuous anti-convulsive therapy
- a permanent fistula requiring continuous surgical dressing or requiring an appliance
- undergoing treatment for cancer. This includes treatment for the effects of cancer or for the effects of cancer treatments

Pre-payment certificate

Pre-payment certificates (PPC) are for patients not entitled to free prescriptions but who receive frequent prescriptions. They are cheaper if the patient pays for more than 14 prescriptions per year

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 58 of 165



Which one of the following statement regarding the 2005 Mental Capacity Act is incorrect?



- A. Patients with Down's syndrome should be assumed to have capacity
- B. Applies to patients of any age
- C. Patients who are schizophrenic should be assumed to have capacity
- D. The views of family members should be sought when assessing a patients best interests
- E. Applies to a patient who is suffering a temporary impairment

The Mental Capacity Act does not apply to children. All patients should be assumed to have capacity, regardless of diagnosis, until proven otherwise

Mental Capacity Act

The Mental Capacity Act of 2005 came into force in 2007. It applies to adults over the age of 16 and sets out who can take decisions if a patient becomes incapacitated (e.g. following a stroke). Mental capacity includes the ability to make decisions affecting daily life, healthcare and financial issues.

The Act contains 5 key principles:

- A person must be assumed to have capacity unless it is established that he lacks capacity
- A person is not to be treated as unable to make a decision unless all practicable steps to help him to do so have been taken without success
- A person is not to be treated as unable to make a decision merely because he makes an unwise decision
- An act done, or decision made, under this Act for or on behalf of a person who lacks capacity must be done, or made, in his best interests
- Before the act is done, or the decision is made, regard must be had to whether the purpose for which it is needed can be as effectively achieved in a way that is less restrictive of the person's rights and freedom of action

Assessment of capacity

The Act sets out a clear test for assessing whether a person lacks capacity. It is a 'decision-specific' and 'time-specific' test. An adult can only be considered unable to make a particular decision if:

1. He or she has an 'impairment of, or disturbance in, the functioning of the mind or brain' whether permanent or temporary AND
2. He or she is unable to undertake any of the following

Question stats

A	<div style="width: 5%;"></div>	5%
B	<div style="width: 60.2%;"></div>	60.2%
C	<div style="width: 4.1%;"></div>	4.1%
D	<div style="width: 12.5%;"></div>	12.5%
E	<div style="width: 18.3%;"></div>	18.3%

60.2% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

- a. understand the information relevant to the decision
- b. retain that information
- c. use or weigh that information as part of the process of making the decision
- d. communicate the decision made by talking, sign language or other means

No individual can be labelled 'incapable' simply as a result of a particular medical condition. Section 2 of the Act makes it clear that a lack of capacity cannot be assumed by a person's age, appearance, or any condition or aspect of a person's behaviour

Best interests

The following should be considered when assessing what is in someone's best interests:

- 1. Whether the person is likely to regain capacity and can the decision wait.
- 2. How to encourage and optimise the participation of the person in the decision.
- 3. The past and present wishes, feelings, beliefs, values of the person and any other relevant factors
- 4. Views of other relevant people

Lasting Powers of Attorney (LPAs)

The Act allows a person to appoint an attorney to act on their behalf if they should lose capacity in the future, replacing the current Enduring Power of Attorney (EPA). In addition to property and financial affairs the Act also allows people to empower an attorney make health and welfare decisions. The attorney only has the authority to make decisions about life-sustaining treatment if the LPA specifies that. Before it can be used an LPA must be registered with the Office of the Public Guardian

Advance decisions

Advance decisions can be drawn up by anybody with capacity to specify treatments they would not want if they lost capacity. They may be made verbally unless they specify refusing life-sustaining treatment (e.g. Ventilation) in which case they need to be written, signed and witnessed to be valid. Advance decisions cannot demand treatment

Rate question:

Question 59 of 165



Which one of the following statements is not a stated duty of a doctor in the General Medical Council document 'Duties of a doctor'?



- A. Keep your professional knowledge and skills up to date
- B. Never discriminate unfairly against patients or colleagues
- C. Provide holistic care addressing patients' physical, psychological and social needs
- D. Respect patients' right to confidentiality
- E. Recognise and work within the limits of your competence

Knowledge of the GMC document 'Good Medical Practice' is a stated requirement in the nMRCGP syllabus

General Medical Council: duties of a doctor

Make the care of your patient your first concern

Protect and promote the health of patients and the public

- Provide a good standard of practice and care
- Keep your professional knowledge and skills up to date
- Recognise and work within the limits of your competence
- Work with colleagues in the ways that best serve patients' interests

Treat patients as individuals and respect their dignity

- Treat patients politely and considerately
- Respect patients' right to confidentiality

Work in partnership with patients

- Listen to patients and respond to their concerns and preferences
- Give patients the information they want or need in a way they can understand
- Respect patients' right to reach decisions with you about their treatment and care
- Support patients in caring for themselves to improve and maintain their health

Be honest and open and act with integrity

- Act without delay if you have good reason to believe that you or a colleague may be putting patients at risk
- Never discriminate unfairly against patients or colleagues
- Never abuse your patients' trust in you or the public's trust in the profession.

Question stats

A	5.4%
B	21.2%
C	62.7%
D	3%
E	7.7%

62.7% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 60 of 165



Which one of the following statements regarding visual impairment is incorrect?



- A. The patients registered GP needs to make an application to social services for blind registration
- B. Blind patients are entitled to a reduced television license fee
- C. Registration is voluntary
- D. In the UK blindness is defined as vision < 3/60 in the better eye
- E. Macular degeneration is the most common cause of severe visual impairment in the UK in the over 75s

A consultant ophthalmologist rather than a GP needs to make an application to social services

Visual impairment

Blindness is generally defined as vision < 3/60 in the better eye. Registration is voluntary in England. Patients who are deemed blind are eligible for additional benefits (for example disabled parking badge, reduced television license fee, talking books). A consultant ophthalmologist is needed to make an application to social services

Rate question:

Question stats

A	<div style="width: 64%;"></div>	64%
B	<div style="width: 6.2%;"></div>	6.2%
C	<div style="width: 8.6%;"></div>	8.6%
D	<div style="width: 14.7%;"></div>	14.7%
E	<div style="width: 6.6%;"></div>	6.6%

64% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 61 of 165



You are reviewing the Practice policy on controlled drugs. Which type of controlled drugs must be recorded in a register?

- A. Schedules 1, 2, 3, 4 & 5
- B. Schedules 2 & 3
- C. Schedule 3
- D. Schedules 2, 3, 4 & 5
- E. **Schedule 2**



Question stats

A	4.1%
B	53.5%
C	5.6%
D	6%
E	30.7%

30.7% of users answered this question correctly

Session score = 0%

Controlled drugs: storage and register

Storage

In the surgery controlled drugs (CDs) should be stored in a locked cabinet.

Controlled drugs outside of the surgery must be stored in a locked receptacle (combination lock or key). A doctor's bag with a lock is acceptable. It should be noted that storing a controlled drug in a locked car boot is not acceptable.

Register

A register must be kept for the supply of Schedule 2 drugs.

Specific requirements of the register:

- must be bound rather than loose leaved. Computerised records are acceptable as long as they are secure and auditable
- each drug should have its own individual section
- entries should be chronological and made in indelible ink
- the following information should be recorded when receiving CDs: date, name and address of the supplier, quantity received, name, form and strength
- the following information should be recorded when supplying CDs (either to patients or practitioners): date, name and address of the person receiving the CD, person who prescribed or ordered the CD, quantity supplied, name, form and strength
- must be kept for a minimum of 2 years after the date of the last entry

For doctor's bags a separate CD register should be kept for the CD stock held within that bag. The individual doctor is responsible for the receipt and supply of CDs from their own bag.

RCGP curriculum

4.1 - Management in Primary Care


[Curriculum statement](#)

Rate question:

Question 62 of 165



You are a GP registrar. Whilst on a night-out the F2 doctor asks if you would like to go out for dinner. What is the most appropriate response?




- A. Tell the F2 doctor you would rather wait until the end of the current job before dating
- B. Ask to be moved to a different practice
-  C. **Make a decision based on whether you like that person or not**
- D. Tell the F2 doctor you do not feel it is professional to have a relationship with a work colleague
- E. Report the doctor to the GMC

There is nothing wrong with dating a colleague! Many doctors meet their future partner whilst at work. This question looks at whether you can give a sensible, measured answer as opposed to one which you think is 'right'.

—

Rate question:

Question stats

A		15%
B		0.3%
C		61%
D		23.7%
E		0.1%

61% of users answered this question correctly

Session score = 0%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 63 of 165



You are a GP registrar. The next patient has been seen at the surgery before complaining of being tired all the time. She brings in a letter from a private clinic asking you to prescribe thyroxine. In the letter the consultant explains that whilst the patient's TSH is normal the thyroxine level is at the lower end of the normal range and he feels that a trial of thyroxine is indicated to help speed up her metabolism. What is the most appropriate action?



- A. Respect the consultant's opinion and prescribe thyroxine
- B. Write a letter to the consultant asking for clarification as to why thyroxine is being prescribed
- C. Write a letter to the consultant explaining that you are not happy to prescribe thyroxine
- D. Advise the patient to sue the consultant
- E. Refer the patient to an endocrinologist on the NHS for a second opinion

Question stats

A	<div></div>	13.3%
B	<div></div>	59.5%
C	<div></div>	13.3%
D	<div></div>	0.2%
E	<div></div>	13.8%

59.5% of users answered this question correctly

Session score = 0%

Inappropriate requests for medication or treatment may occasionally be made by third parties.

The best response is to write to the consultant asking for clarification. It may be that it is a recognised/established treatment that they are requesting. This approach avoids making the mistake of presuming a treatment option is not valid simply because you have not heard of it. The next best option is to write a letter explaining that you are not happy prescribe thyroxine.

Referring the patient to a NHS consultant would hopefully ensure they receive appropriate treatment but may not be necessary or desired by the patient. Simply accepting a treatment because a third party has recommended it is a poor option as it may potentially put the patient at risk - what if the thyroxine request was a typing error?

—

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Questions 64 to 66 of 165



Theme: Benefits

- A Bereavement Allowance
- B Bereavement Payment
- C Statutory Sick Pay
- D Disability Living Allowance
- E Employment and Support Allowance
- F State pension
- G Income Support
- H Job Seekers Allowance
- I No benefits claimable

Question stats

Average score for registered users:

64	<div></div>	77.4%
65	<div></div>	78.5%
66	<div></div>	79.8%

Session score = 1.5%

For each of the following scenarios select the claimable benefit

64. A 45-year-old solicitor who works full time despite his depression



Bereavement Allowance

The correct answer is No benefits claimable

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

65. Regular payment to a 45-year-old accounts clerk whose wife has recently died



Bereavement Allowance

66. 66-year-old man with diabetes mellitus who works full time as a architect



Bereavement Allowance

The correct answer is State pension

Benefits

Whilst GPs are not supposed to be experts on claimable benefits, a rough understanding is expected

Income support	Aged 16-59 years, on low income, working less than 16 hours per week and not receiving Job Seekers Allowance
Job Seekers Allowance	From 19 years old to state pension age. Claimants must be capable of working and agree to actively seek work
Disability Living Allowance	Tax-free benefit for children and adults who need help with personal care or have walking difficulties because they are physically or mentally disabled
Statutory Sick Pay	For employees unable to work due to illness. Unable to work for > 4 days in a row. Paid up to a maximum of 28 weeks
Incapacity Benefit & Employment and Support Allowance	Employment and Support Allowance replaced Incapacity Benefit for new claimants from October 2008. Claimable by those not entitled to Statutory Sick Pay (SSP), for example self-employed, or when SSP has ended
Retirement pension	State pension may be claimed from 60 years for women and 65 years for men. State pensions are taxable and paid even if the claimant is still working
Bereavement payment	Lump sum given to spouse if they are under state pension age when their partner died Depends on national insurance contributions Not payable to divorcees
Bereavement allowance	Taxable weekly benefit paid to the spouse for up to 52 weeks from the date of death, if the surviving partner is 45 years or older and less than the state pension age
Health in Pregnancy Grant	Payable to pregnant women between the 25th week of pregnancy and expected date of delivery. One-off lump sum, patients need form signing by midwife or doctor. Due to be scrapped from the 1st January 2011.

Rate question:

Question 67 of 165



A 55-year-old accountant presents to surgery requesting a sick note following an open repair of an inguinal hernia. According to Department of Work and Pensions advice, when should he be able to return to work?

- A. After 5 days
- B. After 7 days
- C. After 1 - 2 weeks
- D. After 2 - 3 weeks
- E. After 3 - 4 weeks



Inguinal hernia repair: back to work after 2-3 weeks if open, 1-2 weeks if laparoscopic

Inguinal hernia

Inguinal hernias account for 75% of abdominal wall hernias. Around 95% of patients are male; men have around a 25% lifetime risk of developing an inguinal hernia.

Features

- groin lump: disappears on pressure or when the patient lies down
- discomfort and ache: often worse with activity, severe pain is uncommon
- strangulation is rare

Whilst traditional textbooks describe the anatomical differences between indirect (hernia through the inguinal canal) and direct hernias (through the posterior wall of the inguinal canal) this is of no relevance to the clinical management.

Management

- the clinical consensus is currently to treat medically fit patients even if they are asymptomatic
- a hernia truss may be an option for patients not fit for surgery but probably has little role in other patients
- mesh repair is associated with the lowest recurrence rate

The Department for Work and Pensions recommend that following an open repair patients return to non-manual work after 2-3 weeks and following laparoscopic repair after 1-2 weeks

Complications

Question stats

A	1.4%
B	5.9%
C	26.3%
D	48.1%
E	18.3%

48.1% of users answered this question correctly

Session score = 1.5%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

- early: bruising, wound infection
- late: chronic pain, recurrence

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 68 of 165



The wife of a 75-year-old man who died at home following a long illness with lung cancer phones for advice. You have just completed the death certificate. She is asking what the next step is. What is the most appropriate advice?



- She should notify the police of the death then collect the death certificate from the surgery and take it to the Funeral Directors
- She should collect the death certificate from the surgery and take it to the local Registrar of Births, Deaths, and Marriages office
- You will send a copy to the Coroner's Office who will then send her the certificate for Burial or Cremation
- She should collect the death certificate from the surgery and take it to the Funeral Directors
- You will send a copy to the Coroner's Office who will then send her an appointment for the local Registrar of Births, Deaths, and Marriages office

Question stats

A	1.6%
B	80.5%
C	3.9%
D	9.4%
E	4.6%

80.5% of users answered this question correctly

Session score = 1.5%

Death certification

There is no legal definition of death in the UK although guidelines exist. Current guidance states 'death should be verified by a doctor, or other suitably qualified personnel' which means staff such as nurse practitioners may verify (but not certify) death.

After a patient has died a doctor needs to complete a medical certificate of cause of death (MCCD). There is a list of circumstances in which a doctor should notify the Coroner prior to completing the MCCD.

Some specific points on completing the MCCD:

- 'old age' as 1a is only acceptable if the patient was at least 80 years of age . It can be used if certain conditions are met but is discouraged
- 'natural causes' is not acceptable
- organ failure (e.g. 'liver failure') can only be used if you specify the disease or

condition that led to the organ failure (e.g. 1b: Hepatitis C)

- abbreviations should be avoided (except HIV and AIDS*)

The family then take the MCCD to the local Registrar of Births, Deaths, and Marriages office to register the death. If the Registrar decides that the death does not need reporting to the Coroner he/she will issue:

- certificate for Burial or Cremation
- certificate of Registration of Death (for Social Security purposes)
- if requested. Copies of the Death Register (banks and insurance companies)

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Home Office](#)

Guidance for doctors completing Medical Certificates

[Ministry of Justice](#)

Cremation guidelines

expect to see them)

If the family would like the burial to be outside of England, an Out of England Order is needed from the coroner.

*why this is I'm not sure - probably due to how well known the terms are amongst the general public

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

- physical examination
- diagnosis and problem-solving
- patient management
- relating to patients
- anticipatory care
- record keeping

Neighbour - The Inner Consultation - five checkpoint model - 1987

- connecting
- summarising
- handing over
- safety netting
- housekeeping

Tuckett - meeting of two experts - 1985

- the consultation is a meeting between two experts
- doctors are experts in medicine
- patients are experts in their own illnesses
- shared understanding is the aim
- doctors should seek to understand the patient's beliefs
- doctors should address explanations in terms of the patient's belief system

Stott and Davis - Exceptional potential of the consultation - 1979

- management of presenting problems
- management of continuing problems
- modification of help-seeking behaviour
- opportunistic health promotion

Rate question:

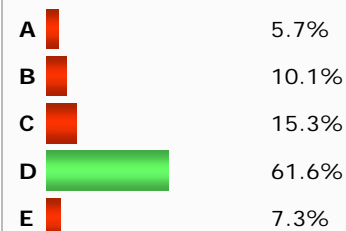
Question 71 of 165



Which one of the following statements regarding the Quality and Outcomes Framework (QOF) is incorrect?

- A. 5% of practices should be visited at random to help prevent fraud
- B. Participation in the QOF is voluntary
- C. For clinical indicators the value of a point is determined by the prevalence of that condition in the practice
- ✓ D. **Cervical screening is an example of a clinical indicator**
- E. Clinical indicators account for the majority of the points

Question stats



61.6% of users answered this question correctly

Session score = 1.4%

Cervical screening is an additional service in the QOF

Quality and Outcomes Framework

The Quality and Outcomes Framework (QOF) is the annual reward and incentive programme detailing GP practice achievement results. It was introduced as part of the new General Medical Services (GMS) to incentivise not only the management of chronic disease such as diabetes but also to improve the organisation of the practice and patient experience

Other points

- for clinical indicators the value of a point is determined by the prevalence of that condition in the practice
- participation in the QOF is voluntary
- 5% of practices should be visited at random to help prevent fraud. The PCT visiting team will normally consist of a PCT management representative, a GP and a patient representative

The table below shows the four key areas on which the QOF is based

Clinical indicators	697 points	Standards linked to the care of patients suffering from chronic diseases
Organisational	167.5 points	Standards relating to records and information, communicating with patients, education and training, medicines management and clinical and practice management
Additional services	44 points	Covering cervical screening, child health surveillance, maternity services and contraceptive services
Patient experience	91.5 points	Based on patient surveys and length of consultations

Patients may be 'exception reported' in the following situations:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

- patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the preceding 12 months
- patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances e.g. Terminal illness, extreme frailty
- patients newly diagnosed within the practice or who have recently registered with the practice, who should have measurements made within 3 months and delivery of clinical standards within 9 months e.g. Blood pressure or cholesterol measurements within target levels
- patients who are on maximum tolerated doses of medication whose treatment remain sub-optimal
- patients for whom prescribing a medication is not clinically appropriate e.g. Those who have an allergy, another contraindication or have experienced an adverse reaction
- where a patient has not tolerated medication
- where a patient does not agree to investigation or treatment (informed dissent), and this has been recorded in their medical records
- where the patient has a supervening condition which makes treatment of their condition inappropriate e.g. Cholesterol reduction where the patient has liver disease
- where an investigative service or secondary care service is unavailable

Rate question:

Question 72 of 165



You are designing a way of assessing Foundation year 2 doctors who are assigned to the surgery. You decide to use a combination of techniques such as patient feedback questionnaires, video consultations and case-based discussions to get a more accurate picture of the trainee. What is this an example of?

- A. Discourse analysis
- B. Quantitative research
- C. Theoretical sampling
- ✓ D. **Triangulation**
- E. Grounded theory

Question stats

A		19.6%
B		16.3%
C		7.2%
D		51.5%
E		5.3%

51.5% of users answered this question correctly

Session score = 1.4%

Triangulation

Triangulation refers to the use of more than one method or approach to evaluate a process, individual or organisation. An example would be the use of multiple assessments (AKT, CSA, COTs, CEXs, patient feedback etc) when assessing a GP trainee. This decreases the likelihood that inaccurate results or outcomes are obtained due to one flawed assessment process.

Rate question:

RCGP curriculum

3.7 - Teaching, Mentoring, Clinical Supervision

[Curriculum statement](#)

- generally should be stored in the a fridge at **+2°C to +8°C** and kept in original packaging to protect the vaccine from UV light
- refrigerator temperature should be monitored using a maximum-minimum thermometer and recorded daily
- ordinary domestic refrigerators should not be used
- surgeries should keep no more than 2 to 4 weeks' supply of vaccines at any time

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 2 of 93


The following symbol appears in the British National Formulary:



What does it mean?



- A. Prescription-only medicine
- B. Denotes a preparation that is less suitable to prescribe
- C. Newly licensed medicine
- D. Not prescribable on the NHS
- E. Controlled drug

Question stats

A	5.3%
B	66.8%
C	15.8%
D	7.2%
E	4.9%

66.8% of users answered this question correctly

Session score = 50%

British National Formulary symbols

The table below explains the meanings of the main symbols used in the BNF:

	Denotes a preparation that is less suitable to prescribe
	Newly licensed medicines
	Not prescribable on the NHS
	Prescription-only medicine
	Controlled drug

Rate question:

RCGP curriculum


4.1 - Management in Primary Care

[Curriculum statement](#)

Question 3 of 93



A surgery sets up a new service where they employ a Nurse Practitioner (NP) to look after a local nursing home. The GPs do not visit unless requested to by the NPs. An 84-year-old man with dementia develops a chest infection. After the NP has had discussions with his family a decision is made to treat with oral antibiotics but not to admit. He dies two days later and his death is verified by a GP from the local out-of-hours service. What is the most appropriate action?

- A. Call the police
- B. Patients registered GP completes a death certificate, 1a 'Bronchopneumonia'
- C. Nurse Practitioner completes a death certificate, 1a 'Bronchopneumonia'
-  D. Report the death to the Coroner
- E. Out-of-hours GP completes a death certificate, 1a 'Bronchopneumonia'

This patient was not seen by a doctor in the last 14 days of his illness therefore the death should be reported

Death certification

There is no legal definition of death in the UK although guidelines exist. Current guidance states 'death should be verified by a doctor, or other suitably qualified personnel' which means staff such as nurse practitioners may verify (but not certify) death.

After a patient has died a doctor needs to complete a medical certificate of cause of death (MCCD). There is a list of circumstances in which a doctor should notify the Coroner prior to completing the MCCD.

Some specific points on completing the MCCD:

- 'old age' as 1a is only acceptable if the patient was at least 80 years of age . It can be used if certain conditions are met but is discouraged
- 'natural causes' is not acceptable
- organ failure (e.g. 'liver failure') can only be used if you specify the disease or

condition that led to the organ failure (e.g. 1b: Hepatitis C)

- abbreviations should be avoided (except HIV and AIDS*)

The family then take the MCCD to the local Registrar of Births, Deaths, and Marriages office to register the death. If the Registrar decides that the death does not need reporting to the Coroner he/she will issue:

- certificate for Burial or Cremation
- certificate of Registration of Death (for Social Security purposes)

Question stats

A	1%
B	18.3%
C	3.9%
D	69.2%
E	7.7%

69.2% of users answered this question correctly

Session score = 33.3%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Home Office](#)

Guidance for doctors completing Medical Certificates

[Ministry of Justice](#)

Cremation guidelines

- if requested. Copies of the Death Register (banks and insurance companies expect to see them)

If the family would like the burial to be outside of England, an Out of England Order is needed from the coroner.

*why this is I'm not sure - probably due to how well known the terms are amongst the general public

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 4 of 93



The Practice Manager is concerned that the surgery is not fully compliant with the Data Protection Act. Which body must the surgery register with?



- A. Information Commissioner's Office
- B. Independent NHS Data Monitoring Office
- C. NHS Data Office
- D. Home Office
- E. Local police station

Following the 1998 the Data Protection Act all entities (e.g. a GP surgery) that process personal information must register with the Information Commissioner's Office.

Data Protection Act

The 1998 Data Protection Act is the main piece of legislation that governs the protection of personal data in the UK. The Act covers both manual and computerised records.

There are 8 main principles of the Data Protection Act:

- data must be used for the specific purpose it was collected
- data must not be disclosed to other parties without the consent of the individual whom it is about
- individuals have a right of access to the information held about them
- personal information may be kept for no longer than is necessary and must be kept up-to-date
- personal information may not be transmitted outside the European Union unless consent has been given
- all entities (e.g. a GP surgery) that process personal information must register with the Information Commissioner's Office
- adequate security measures must be in place. Those include technical measures (e.g. passwords, firewalls) and organisational measures (e.g. staff training)
- subjects (i.e. patients) have the right to have factually incorrect information about them corrected

Rate question:

Question stats

A		66%
B		20.2%
C		11.1%
D		2.5%
E		0.3%

66% of users answered this question correctly

Session score = 25%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Information Commissioner's Office](#)

Guidelines on recording opinions

Question 5 of 93



Which one of the following statements best describes the essence of the Personal Medical Services contract?

- A. Funding follows the patient rather than the practice
- B. Practices are paid to provide core services and do not receive QOF income
- C. Run by alternative providers (e.g. Private sector) rather than GPs
- ✓ D. Local contract which reflects local patient needs
- E. A basic contract for providers who have failed to meet the standards set out by the general medical services (GMS) contract

Question stats

A	8.9%
B	6.6%
C	6.3%
D	76.1%
E	2.1%

76.1% of users answered this question correctly

Session score = 20%

GP contract: PMS contract

The Personal Medical Services (PMS) contract is a locally agreed and managed contract.

The original aims of PMS were:

- to give greater freedom for GP's to address patients needs
- to encourage flexible and innovative ways of working
- to tackle under doctored areas

The contract consists of core and additional services (similar to the GMS) contract but the additional services may include things such as community endoscopy.

Specialist PMS contracts (SPMS) may be tailored to the needs of particular communities (e.g. Refugees).

GP's who have worked under the PMS contract have historically earned more than those under the GMS contract. It is likely this will be 'clawed back' in the near future.

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 6 of 93



A patient is removed from the practice list following an assault on one of the receptionists. Who is responsible for organising an alternative primary care provider?



- A. The primary care trust
- B. The patient has sole responsibility
- C. The current practice
- D. The nearest alternative local practice
- E. The police

In this scenario the local primary care trust are responsible for organising alternative care. Many primary care trusts will organise specific primary care services for aggressive/violent patients.

Removing patients from the practice list

The following is based on the 2004 Royal College guidelines.

Examples of situations that may justify removal:

- unacceptable behaviour: for example violence, sexual harassment, stalking, racial abuse
- crime and deception: for example fraudulently obtaining drugs, stealing from the practice
- distance: a patient moves outside the catchment area

Examples of situations that do not normally justify removal:

- clinical matters: ? patient choice, for example refusing to attend for health screening or not bringing their child for immunisations
- critical questioning and/or complaints

Removal is never justified in the following situations

- where there is an exacting or highly dependent patient, condition or disability
- patients with a high levels of anxiety or demand about perceived symptoms
- due to age, gender, ethnic origin, religion or sexual orientation

Further guidance is given on exceptional situations where there is an 'irretrievable breakdown' in the doctor-patient relationship. It is important that a formal process is agreed to try and rectify this problem rather than unilaterally declaring an irretrievable breakdown without giving any reasons to the patient.

Removing a patient from the practice list involves the following steps:

Question stats

A	<div style="width: 68.3%;"></div>	68.3%
B	<div style="width: 27.1%;"></div>	27.1%
C	<div style="width: 3.4%;"></div>	3.4%
D	<div style="width: 0.8%;"></div>	0.8%
E	<div style="width: 0.5%;"></div>	0.5%

68.3% of users answered this question correctly

Session score = 33.3%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[RCGP](#)

Removing patients from the practice list guidelines

- give warning to the patient
- inform the Primary Care Trust in writing
- write to the patient

The patient's family should not be automatically removed although in practice this may be necessary.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 7 of 93


You review a 60-year-old man who has motor neuron disease. He tells you he plans to go to Switzerland if he deteriorates as euthanasia is legal there. What is the most appropriate initial response?

- A. Inform him that it is illegal to aid anyone to commit euthanasia
- B. Reassure him that most doctors will use the 'double-effect' principle anyway to hasten the terminal phase
- C. Give him details of the appropriate clinics in Switzerland
- D. **Discuss his fears about the terminal phase**
- E. **Suggest he contacts the Motor Neuron Disease Association so that he can talk to people in a similar situation**


Question stats

A		4.8%
B		0.2%
C		0.5%
D		84.6%
E		9.9%

84.6% of users answered this question correctly

Session score = 28.6%

This issue has become increasingly relevant in recent years with a number of UK patients travelling to the 'Dignitas' clinic in Switzerland. As the law currently stands it is illegal to aid anyone to commit suicide. The best response is to explore his fears about the terminal phase. This will allow you to discuss the progress made in palliative care. It may also be beneficial if he discusses his fears with people who have experience of similar scenarios. They may be able to provide reassurance.

If he remains committed to travel to Switzerland it is appropriate to inform him of the current legal situation. Giving him details of the appropriate clinics may be seen legally as aiding suicide.

The 'double-effect' principle applies to accepting the side-effects of appropriate pain relief. It does not relate to hastening death deliberately and to give that impression is inappropriate.

—

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 8 of 93



A 34-year-old is reviewed following an episode of 'collapse' whilst at church. She describes feeling hot and nauseous after standing up to sing a hymn. A few moments later she could 'feel herself going' and proceeded to fall to the ground. Her husband describes how her arms twitched at one point, but there was no tongue biting or urinary incontinence. She made a quick recovery and continued to finish the church service. Neurological examination today is unremarkable. What is the most appropriate advice regarding driving?

- A. Cannot drive for 6 months
- B. Cannot drive until investigations including ECG and neuroimaging have been performed
- C. No need to inform DVLA
- D. Cannot drive for 4 weeks
- E. Inform DVLA but can continue to drive



DVLA - simple faint - no need to inform DVLA

This is a typical history of a simple faint - there are no features to suggest epilepsy or another organic cause

DVLA: neurological disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Specific rules

- first seizure: 6 months off driving*. For patients with established epilepsy they must be fit free for 12 months before being able to drive
- stroke or TIA: 1 month off driving
- multiple TIAs over short period of times: 3 months off driving
- craniotomy e.g. For meningioma: 1 year off driving**
- pituitary tumour: craniotomy: 6 months; trans-sphenoidal surgery 'can drive when there is no debarring residual impairment likely to affect safe driving'
- narcolepsy/cataplexy: cease driving on diagnosis, can restart once 'satisfactory control of symptoms'

Syncope

- simple faint: no restriction
- unexplained, low risk of recurrence: 4 weeks off
- explained and treated: 4 weeks off
- unexplained: 6 months off

Question stats

A	3.8%
B	5.9%
C	80.5%
D	6.6%
E	3.2%

80.5% of users answered this question correctly

Session score = 25%

RCGP curriculum

15.7 - Neurological Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DVLA](#)

Neurological disorder guidelines

*previously rule was 12 months. It is now 6 months off driving if the licence holder has undergone assessment by an appropriate specialist and no relevant abnormality has been identified on investigation, for example EEG and brain scan where indicated

**if the tumour is a benign meningioma and there is no seizure history, licence can be reconsidered 6 months after surgery if remains seizure free

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Questions 9 to 11 of 93



Theme: Scoring systems used in medicine

- A Gleason score
- B Bishop score
- C Smith scale
- D CHADS2
- E ABCD2
- F DAS28
- G Lowsby rating
- H Baxter score
- I CURB-65
- J Epworth scale

Question stats

Average score for registered users:

9	<div></div>	94.2%
10	<div></div>	85.8%
11	<div></div>	88.4%

Session score = 18.2%

For each of the following please select the appropriate scoring system:

9. Used to assess the prognosis of a patient with pneumonia



Gleason score

The correct answer is CURB-65

10. Prognostic score for risk stratifying patients who've had a suspected TIA



Gleason score

The correct answer is ABCD2

11. Used to help assess the whether induction of labour will be required



Gleason score

The correct answer is Bishop score

Scoring systems

There are now numerous scoring systems used in medicine. The table below lists some of the more common ones:

CHADS2	Used to determine the need to anticoagulate a patient in atrial fibrillation
ABCD2	Prognostic score for risk stratifying patients who've had a suspected TIA
NYHA	Heart failure severity scale
DAS28	Measure of disease activity in rheumatoid arthritis
Child-Pugh classification	A scoring system used to assess the severity of liver cirrhosis
Wells score	Helps estimate the risk of a patient having a deep vein thrombosis
MMSE	Mini-mental state examination - used to assess cognitive impairment
HAD	Hospital Anxiety and Depression (HAD) scale - assesses severity of anxiety and depression symptoms
PHQ-9	Patient Health Questionnaire - assesses severity of depression symptoms
GAD-7	Used as a screening tool and severity measure for generalised anxiety disorder
Edinburgh Postnatal Depression Score	Used to screen for postnatal depression
SCOFF	Questionnaire used to detect eating disorders and aid treatment
AUDIT	Alcohol screening tool
CAGE	Alcohol screening tool
FAST	Alcohol screening tool
CURB-65	Used to assess the prognosis of a patient with pneumonia
Epworth Sleepiness Scale	Used in the assessment of suspected obstructive sleep apnoea
IPSS	International prostate symptom score
Gleason score	Indicates prognosis in prostate cancer
APGAR	Assesses the health of a newborn immediately after birth
Bishop score	Used to help assess the whether induction of labour will be required
Waterlow score	Assesses the risk of a patient developing a pressure sore
FRAX	Risk assessment tool developed by WHO which calculates a patients 10-year risk of developing an osteoporosis related fracture

Can you think of any other commonly used scoring systems?

Rate question:

Question 12 of 93


You are a registrar in General Practice and have now been at the surgery for the past 8 months. A 57-year-old female patient comes to see you at least once a week, sometimes more often. She has a history of depression and fibromyalgia but has no other significant chronic disease. Typically she'll present with ongoing arthralgia, myalgia, low mood and pruritus. Despite extensive investigations no underlying organic cause has been found for her symptoms. She is always polite and punctual. What is the most appropriate response to this scenario?

- A. Ask her to limit visits or consider registering with another practice
- B. Tell the patient she is limited to one consultation every 2 weeks
- C. **Have a conversation with the patient about her frequent attendance and suggest booking a regular appointment every two weeks initially**
- D. Suggest to the patient that her frequent attendance suggests you aren't getting anywhere and that she may be better seeing another GP
- E. Take no action as mentioning her frequent visits may damage the doctor-patient relationship


Question stats

A	0.4%
B	1.1%
C	88.4%
D	5.3%
E	4.7%

88.4% of users answered this question correctly

Session score = 25%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

This question looks at the management of a 'frequent-flyer'.

From the scenario it appears that the patient has developed an element of doctor dependence. The best option is to be honest with the patient about your observations and suggest a way of resolving the issue. One of the best approaches to this problem is to arrange regular appointments, the time between which can be gradually increased.

It is sometimes easy to forget the amount of trust and respect some patients still have for doctors. Advising her to see another doctor may seem attractive if you find the consultations tiresome but is likely to be taken personal by the patient. Artificially limiting consultations to once every 2 weeks is potentially dangerous in case the patient develops an urgent problem.

This is not grounds for removal from the practice list.

—

Rate question:

Question 13 of 93


Which one of the following drugs should be prescribed using the proprietary, rather than the generic name?

- A. Amiodarone
- B. Modified release beta-blockers
- C. Long-acting beta 2 agonists
- D. Modified release calcium channel blockers
- E. Atypical antipsychotic agents such as olanzapine


Question stats

A	3.8%
B	7.9%
C	13.9%
D	58.1%
E	16.2%

58.1% of users answered this question correctly

Session score = 23.1%

Prescribing guidance

The BNF issues guidance on good practice when prescribing, selected points include:

- drugs should generally be prescribed by their generic name, except for certain preparations where the clinical effect may differ - please see the list below
- when writing numbers unnecessary decimal points should be avoided e.g. 250 ml not 0.25 l

Drugs which should be prescribed by brand

- modified release calcium channel blockers
- antiepileptics
- ciclosporin and tacrolimus
- mesalazine
- lithium
- aminophylline and theophylline
- methylphenidate
- CFC-free formulations of beclometasone
- dry powder inhaler devices

RCGP curriculum

3.2 - Patient Safety

[Curriculum statement](#)

Rate question:

Question 14 of 93



Which one of the following statements regarding Balint groups is true?

- A. Were first started in the 1980's
- B. Are always chaired by a psychoanalyst
- C. **Are suitable for GP trainees**
- D. Should be no larger than five doctors
- E. The main purpose is to try and agree a patient-centred management plan



Question stats

A	4.2%
B	2.1%
C	76.9%
D	2.6%
E	14.1%

76.9% of users answered this question correctly

Session score = 21.4%

Balint groups

Michael Balint (1896-1970) was a Hungarian psychoanalyst and psychiatrist who shaped many of the modern views on patient centred healthcare. He was primarily interested in the psychological and emotional problems that underlie many presenting complaints. His work encouraged GPs to explore these areas to understand their patients better. Balint coined the phrase 'the doctor as a drug'.

During the 1950's he established small, groups ('Balint Groups') which allowed GPs to discuss their patients on an informal basis. These are not dissimilar to discussions held amongst GP Registrars during their half-day release.

Balint's ideas were published in the book 'The doctor, his patient and the illness'.

Rate question:

RCGP curriculum

2 - The General Practice Consultation

[Curriculum statement](#)

Question 15 of 93



Mrs Smith brings her 82-year-old mother into surgery. She is concerned that her mother is becoming increasingly forgetful. Her mother currently lives with her at the family home. Her mother becomes flustered when a mini-mental state is attempted and says she wants 'no fuss', but is unable to explain what she means by that. What is the most appropriate action?



- A. Take no further action unless the mother gives explicit consent
- B. Refer her to the memory clinic
- C. Apply for a court order
- D. Contact the police
- E. Contact social services

Question stats

A	13.1%
B	83.3%
C	0.6%
D	0.2%
E	2.8%

83.3% of users answered this question correctly

Session score = 20%

It is reasonable to presume in this scenario that the daughter is acting in the best-interests of the patient. Elderly patients with the onset of dementia are often reluctant to acknowledge that a problem exists.

The best option is therefore to refer her to the memory clinic where she can be properly assessed. The patients' inability to complete a mini-mental or explain herself indicates that it may not be appropriate to wait for explicit consent before referring her. Social services do have a role in elderly patients with dementia but there is no indication from the scenario that they need to be involved immediately.

There is no indication that a court order is required here.

—

Rate question:

RCGP curriculum


4.1 - Management in Primary Care

[Curriculum statement](#)

Question 16 of 93



You are a GP registrar. A patient presents with spreading, irregular pigmented lesion on her leg. On examination it looks almost certainly to be a malignant melanoma. You tell the patient that you are concerned it may be a serious form of skin cancer. The patient replies that she doesn't believe in 'western medicine' and wants to use 'traditional remedies' such as homeopathy. How should you respond to this situation?

- A. Call her daughter to discuss the matter
- B. Refer her anyway given the severity of the diagnosis, it is her decision whether she attends or not
- C. Accept her decision and take no further action
-  D. Explain that you will always respect her decision but ask her to come and see you in one week
- E. Explain to the patient that given her decision you are obliged to seek psychiatric review under GMC guidelines

This scenario looks at autonomy in a competent adult. Whilst her decision may seem illogical to you this is not grounds for presuming a lack of mental capacity. The best course of action is to respect her decision but arrange follow-up after she has had time to think.

As mentioned previously an illogical decision is not grounds for presumption of mental incapacity. A psychiatric review is therefore inappropriate and is likely to alienate the patient.

Calling her daughter breaks confidentiality and is the worst option.

—

Rate question:

Question stats

A	1.6%
B	8.1%
C	2.7%
D	86.4%
E	1.2%

86.4% of users answered this question correctly

Session score = 25%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 17 of 93

A 62-year-old woman presents after being discharged from hospital. She was diagnosed as having ovarian cancer six weeks ago and following surgery she is awaiting chemotherapy. Her main reason for coming was to ask for a sick note. What is the maximum length of time you may issue the Statement of Fitness for Work for?

- A. 1 month
- B. 2 months
- C. 3 months
- D. 6 months
- E. Indefinitely



Question stats

A	4.3%
B	1.4%
C	64.7%
D	19.6%
E	10.1%

64.7% of users answered this question correctly

Session score = 29.4%

Statement of Fitness for Work

In 2010 sick notes became fit notes, or more formally the Statement of Fitness for Work. They have been introduced to reflect the fact that in the majority of cases patients do not need to be 100% fit before returning to work. The major change is allowing a doctor to advise that a patient 'may be fit for work taking account of the following advice'.

This information is taken from the Department of Work and Pensions website. Please see the link for further details.

Other changes

- the Statement of Fitness for Work replaces the Med3 and Med5 in one form
- the Med4, Med6 and RM 7 forms have been withdrawn due to the replacement of Incapacity Benefit with the Employment and Support Allowance
- telephone consultations are now an acceptable form of assessment
- there is no longer a box to say a patient is fit for work. There is however an option to state if you need to assess your patient's fitness for work again at the end of the statement period
- there is increased space for comments on the functional effects of the condition, including tick boxes for simple things that may help a patient back to work
- during the first 6 months of an illness the new statement can be issued for no longer than 3 months.. After this time it may be issued for an indefinite period

Things that stay the same

- can only be completed by a doctor
- you can still the advise a patient that they are not fit for work (of any type)
- the advice on the statement is not binding on employers

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Department of Work and Pensions](#)
Statement of Fitness for Work

The statement may be issued:

- on the day that you assessed the patient
- on a date after you assessed your patient if you consider that it would have been reasonable to issue a statement on the day of the assessment
- after consideration of a written report from another doctor or registered health care professional

There are 4 'tick boxes' included on the form which represent common approaches to aid a return to work. One or more may be ticked. Other approaches can be suggested in the comments box. The options are:

- a phased return to work
- altered hours
- amended duties
- workplace adaptations

Patients may self-certify for the first 7 calendar days:

SC1	Self-certification, for patients not eligible to claim statutory sick pay (e.g. Unemployed or self-employed). For the first 7 calendar days of an illness
SC2	The 'standard' self-certification form, for patients eligible to claim statutory sick pay. For the first 7 calendar days of an illness

Rate question:

Question 19 of 93


Which one of the following situations would not automatically require a doctor to contact the coroner to discuss the death?

- A. 54-year-old woman dies 14 hours after admission to hospital with metastatic breast cancer
- B. 71-year-old man dies during an emergency abdominal aortic aneurysm repair
- ✓ C. 38-year-old with alcoholic liver disease dies after 2 week admission to hospital with liver failure
- D. 72-year-old with a history of asbestos related pleural plaques dies of colorectal cancer in a hospice
- E. 24-year-old dies following a road traffic accident

Question stats

A		4.7%
B		2.1%
C		81.4%
D		8.3%
E		3.6%

81.4% of users answered this question correctly

Session score = 36.8%

Even though the 72-year-old patient in stem D died of colorectal cancer he still needs to be reported to the coroner as he has a history of asbestosis

Death certification: notifiable deaths

The following deaths should be reported to the coroner

- unexpected or sudden deaths
- when the doctor attending the deceased did not see them within 14 days before death
- if a death occurs within 24 hours of hospital admission
- accidents and injuries
- suicide
- industrial injury or disease (e.g. asbestosis)
- deaths occurring as a result of ill treatment, starvation or neglect
- the death occurred during an operation or before recovery from the effect of an anaesthetic
- poisoning, including taking illicit drugs
- stillbirths - if there is doubt as to whether the child was born alive
- prisoner or people in police custody
- service disability pensioners

Rate question:
RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Questions 20 to 22 of 93



Theme: DVLA: neurological disorders

- A** No restriction
- B** No restriction but inform DVLA
- C** 1 month off
- D** 3 months off
- E** 6 months off
- F** 12 months off
- G** Once satisfactory control of symptoms
- H** Cannot drive

For each of the following scenarios select the most appropriate advice regarding driving:

20. Transient ischaemic attack - multiple episodes over short period



1 month off

The correct answer is 3 months off

21. Narcolepsy



Cannot drive

The correct answer is Once satisfactory control of symptoms

22. Simple faint



No restriction

Question stats

Average score for registered users:

20	<div style="width: 62.3%;"></div>	62.3%
21	<div style="width: 70.9%;"></div>	70.9%
22	<div style="width: 94.8%;"></div>	94.8%

Session score = 36.4%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DVLA](#)

Neurological disorder guidelines

DVLA: neurological disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Specific rules

- first seizure: 6 months off driving*. For patients with established epilepsy they must be fit free for 12 months before being able to drive
- stroke or TIA: 1 month off driving
- multiple TIAs over short period of times: 3 months off driving
- craniotomy e.g. For meningioma: 1 year off driving**
- pituitary tumour: craniotomy: 6 months; trans-sphenoidal surgery 'can drive when there is no debarring residual impairment likely to affect safe driving'
- narcolepsy/cataplexy: cease driving on diagnosis, can restart once 'satisfactory control of symptoms'

Syncope

- simple faint: no restriction
- unexplained, low risk of recurrence: 4 weeks off
- explained and treated: 4 weeks off
- unexplained: 6 months off

*previously rule was 12 months. It is now 6 months off driving if the licence holder has undergone assessment by an appropriate specialist and no relevant abnormality has been identified on investigation, for example EEG and brain scan where indicated

**if the tumour is a benign meningioma and there is no seizure history, licence can be reconsidered 6 months after surgery if remains seizure free

Rate question:

Question 23 of 93



You are asked to complete the Cremation 5 form of a patient from a neighbouring practice who has recently died. The patient was a 78-year-old man with metastatic lung cancer. Which one of the following best describes your responsibilities?



- A. View the body + discuss with patient's GP
- B. View the body + discuss with family
- C. View the body + contact coroner's office
- D. View the body
- E. View the body + brief review of case notes + discuss with patient's GP

Cremation form - Cremation 5 responsibilities: view the body + discuss with patient's GP

Cremation forms

Basics

- the Ministry of Justice have issued new cremation regulations which came into effect on 1st January 2009
- there is a new right of inspection of medical forms to the applicant of cremation
- 2 doctors are required to confirm both the identity and that the cause of death was not suspicious
- form B is replaced by **Cremation 4**. This should be completed by the patient's own GP or a doctor looking after them during their last illness e.g. Hospital doctors
- form C is replaced by **Cremation 5**. This should be completed by an independent doctor who must have held a full GMC registration for more than 5 years. The doctor is expected to discuss the case with the patient's GP and view the body
- the form Cremation 5 doctor cannot be a partner or work colleague of the form Cremation 4 doctor or a relative of the deceased; the two doctors must be independent of one another, i.e. Not on the same team in hospital or at the same GP surgery
- a fee is payable to each doctor

Rate question:

Question stats

A	<div style="width: 49.3%;"></div>	49.3%
B	<div style="width: 3.5%;"></div>	3.5%
C	<div style="width: 2.6%;"></div>	2.6%
D	<div style="width: 1.7%;"></div>	1.7%
E	<div style="width: 42.9%;"></div>	42.9%

49.3% of users answered this question correctly

Session score = 34.8%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 24 of 93



Which one of the following is not a reason to exception report a patient under the quality and outcomes framework (QOF)?



- A. Where a patient has not tolerated a medication
- B. Patients with a chronic disease who are predominately managed in secondary care
- C. Where a secondary care service is unavailable
- D. Patients with a chronic disease who are terminally ill
- E. Patients who are on maximum tolerated doses of medication whose treatment remain sub-optimal

Question stats

A	8.2%
B	60.9%
C	17.5%
D	6.2%
E	7.2%

60.9% of users answered this question correctly

Session score = 33.3%

Quality and Outcomes Framework

The Quality and Outcomes Framework (QOF) is the annual reward and incentive programme detailing GP practice achievement results. It was introduced as part of the new General Medical Services (GMS) to incentivise not only the management of chronic disease such as diabetes but also to improve the organisation of the practice and patient experience

Other points

- for clinical indicators the value of a point is determined by the prevalence of that condition in the practice
- participation in the QOF is voluntary
- 5% of practices should be visited at random to help prevent fraud. The PCT visiting team will normally consist of a PCT management representative, a GP and a patient representative

The table below shows the four key areas on which the QOF is based

Clinical indicators	697 points	Standards linked to the care of patients suffering from chronic diseases
Organisational	167.5 points	Standards relating to records and information, communicating with patients, education and training, medicines management and clinical and practice management
Additional services	44 points	Covering cervical screening, child health surveillance, maternity services and contraceptive services
Patient experience	91.5 points	Based on patient surveys and length of consultations

Patients may be 'exception reported' in the following situations:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

- patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the preceding 12 months
- patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances e.g. Terminal illness, extreme frailty
- patients newly diagnosed within the practice or who have recently registered with the practice, who should have measurements made within 3 months and delivery of clinical standards within 9 months e.g. Blood pressure or cholesterol measurements within target levels
- patients who are on maximum tolerated doses of medication whose treatment remain sub-optimal
- patients for whom prescribing a medication is not clinically appropriate e.g. Those who have an allergy, another contraindication or have experienced an adverse reaction
- where a patient has not tolerated medication
- where a patient does not agree to investigation or treatment (informed dissent), and this has been recorded in their medical records
- where the patient has a supervening condition which makes treatment of their condition inappropriate e.g. Cholesterol reduction where the patient has liver disease
- where an investigative service or secondary care service is unavailable

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 25 of 93



A 69-year-old woman with rheumatoid arthritis presents for review. She has severe disease of her hands and requires help with washing and dressing. Which one of the following benefit forms should be completed?



- A. Attendance Allowance
- B. Incapacity Benefit
- C. Disability Living Allowance
- D. SF300
- E. DS1500

As this patient is greater than 65-years-old she is entitled to Attendance Allowance rather than Disability Living Allowance

Benefits: chronic illness and cancer patients

Patients who have a chronic illness or cancer, which results in a disability severe enough to need help with caring for themselves, are entitled to claim the following benefits:

- Disability Living Allowance: for patients under the age of 65 years
- Attendance Allowance: for patients over aged 65 years and over

Disability Living Allowance

Disability Living Allowance (DLA) can be claimed by patients who normally have needed help for at least 3 months and be likely to need it for at least a further 6 months. It is tax-free, not means tested and divided into two components:

- Care component
- Mobility component

Attendance Allowance

Attendance Allowance (AA) is a tax-free allowance for people aged 65 or over when they claim who need help with their personal care. To claim AA patients should normally have needed help with care for 6 months. Like DLA it is not means tested

Terminally ill patients

Patients who have a terminal illness (where there is an expectation that the patient will not live for more than 6 months) are eligible to be fast-tracked through the system for claiming DLA or AA. A **DS1500** form is completed which ensures the application is dealt with promptly and that the patient automatically receives the higher rate

Question stats

A	<div style="width: 64.7%;"></div>	64.7%
B	<div style="width: 4.8%;"></div>	4.8%
C	<div style="width: 27.9%;"></div>	27.9%
D	<div style="width: 1.1%;"></div>	1.1%
E	<div style="width: 1.5%;"></div>	1.5%

64.7% of users answered this question correctly

Session score = 32%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 26 of 93



Which one of the following best describes the proposed objective of Secondary Uses Service (SUS) as part of the NHS Connecting for Health plan?



- A. Generates electronic prescriptions to be used by pharmacists
- B. Allows patients to have limited access to their own records over the internet
- C. **Generates anonymised data for research and planning purposes**
- D. Allows commercial companies to have limited access to patient records
- E. Allows hospital doctors to view primary care records

Question stats

A		15.8%
B		3.3%
C		46.4%
D		2%
E		32.4%

46.4% of users answered this question correctly

Session score = 30.8%

Information management and technology

Information management and technology is one of the key parts of the RCGP curriculum

Clinical coding systems

- Read codes: used to code almost any aspect of medical care including symptoms, examinations, investigations, administration, diagnoses and treatment
- SNOMED CT (Systematized Nomenclature of Medicine -- Clinical Terms) is a new system which is replacing Read codes. It will be used by NHS Connecting For Health as the standard terminology for the NHS Care Records Service

Connecting for health

- the NHS Care Records Service (NHS CRS) will be connected by what is known as 'the spine'
- a key part of the NHS CRS will be the gradual development of an electronic Summary Care Record
- Choose and Book will allow GPs and other primary care staff to make initial hospital or clinic outpatient appointments using the spine
- provide a Secondary Uses Service (SUS), using anonymised data for business reports and statistics for research and planning purposes
- Electronic Prescription Service (EPS) is being planned meaning GPs will prescribe a drug electronically after which pharmacists will be able to dispense without a written prescription

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Rate question:

Question 27 of 93


How are Local Medical Committees funded?



- A. Voluntary donations by GPs and Practices
- B. **Statutory levy on GPs**
- C. Primary Care Trust
- D. Department of Health
- E. Fundraising activities such as the Christmas Ball

Question stats

A		5.4%
B		53.3%
C		31.6%
D		9.4%
E		0.3%

53.3% of users answered this question correctly

Session score = 29.6%

Local Medical Committees

Local Medical Committees (LMCs) represent the interests of GPs on a local level. They were established as part of Lloyd George's National Insurance Act in 1911 to try and ensure that GPs had a say in the running of the government's health insurance scheme. At the same time a committee was established within the British Medical Association (BMA) to represent GPs on a national level to the government. This was initially known as the Insurance Acts Committee but is now called the General Practitioners Committee (GPC) and has authority to negotiate with the government on matters such as pay and contracts. It is recognised by the Department of Health as the GP's sole negotiating body.

The GPC meets annually with the representatives of the LMCs, who may submit motions for the conference. This motions may then go on to form GPC policy.

LMCs are funded by a statutory levy on GPs. Each LMC may cover the area which corresponds to one or more Primary Care Trusts. LMC members are elected and include partners, salaried doctors and GP Registrars from both GMS and PMS practices .

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Rate question:

Question 28 of 93



A 34-year-old heroin addict starts methadone treatment. What is the correct procedure with regards to notification?



A. Notify Primary Care Trust if patient consent obtained

B. Notify Primary Care Trust without informing patient



C. Notify National Drug Treatment Monitoring System if patient consent obtained

D. Notify National Drug Treatment Monitoring System without informing patient

E. Notify the local Police Department if patient consent obtained

Question stats

A	9.3%
B	2.6%
C	71.4%
D	16.2%
E	0.5%

71.4% of users answered this question correctly

Session score = 28.6%

Notification of drug misusers

Doctors should inform their regional or national drug misuse centre of patients who have problems with drug misuse including opioid, benzodiazepines and CNS stimulants. Contact details may be found in the BNF. The National Drug Treatment Monitoring System (NDTMS) collects data which allows the planning of drug services and allows the evaluation of the efficiency and effectiveness of drug treatment provision.

Consent needs to be obtained prior to sending patient data to the NDTMS.

Rate question:

RCGP curriculum



4.1 - Management in Primary Care

[Curriculum statement](#)

Question 29 of 93



A 44-year-old man dies at home of a HIV-related illness. His next-of-kin was his mother who was not aware of his HIV infection. He had asked the doctors who had treated him not to disclose this to his family. When completing the cremation form what is the most appropriate action?

- A. Do not disclose HIV infection on cremation form but only list contributory illnesses e.g. Pneumocystis pneumonia
-  B. **Do not disclose HIV infection on cremation form but provide a confidential report to the medical referee on a separate piece of paper**
- C. Record his illness as a 'CD4 disorder'
-  D. **Disclose HIV infection**
- E. Advise his family not to view the cremation forms

Question stats

A		9.5%
B		68.9%
C		6.2%
D		11.9%
E		3.5%

68.9% of users answered this question correctly

Session score = 27.6%

Patient confidentiality should be maintained if possible, even following the death of a patient.

The family now has a right to view both cremation forms. In difficult situations like this it would be advisable to speak to the coroner.

Cremation forms

Basics

- the Ministry of Justice have issued new cremation regulations which came into effect on 1st January 2009
- there is a new right of inspection of medical forms to the applicant of cremation
- 2 doctors are required to confirm both the identity and that the cause of death was not suspicious
- form B is replaced by **Cremation 4**. This should be completed by the patient's own GP or a doctor looking after them during their last illness e.g. Hospital doctors
- form C is replaced by **Cremation 5**. This should be completed by an independent doctor who must have held a full GMC registration for more than 5 years. The doctor is expected to discuss the case with the patient's GP and view the body
- the form Cremation 5 doctor cannot be a partner or work colleague of the form Cremation 4 doctor or a relative of the deceased; the two doctors must be independent of one another, i.e. Not on the same team in hospital or at the same GP surgery
- a fee is payable to each doctor

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 30 of 93



You are organising a review of the management of controlled drug prescription in the surgery. Which one of the following is a Schedule 2 controlled drug as defined by the 2001 Misuse of Drugs Regulations act?

- A. Cannabis
- B. Midazolam
- C. Anabolic steroids
- D. **Diamorphine**
- E. Buprenorphine



Question stats

A	4.8%
B	21.2%
C	2.1%
D	66.8%
E	5.2%

66.8% of users answered this question correctly

Session score = 26.7%

Controlled drugs

When prescribing a controlled drug the following must be present on the prescription:

- name and address of the patient
- the form, and where appropriate the strength, of the preparation

- either the total quantity (in both words and figures) of the preparation, or the number (in both words and figures) of dosage units to be supplied

- the dose (cannot write 'as directed')
- prescribers name, signature, address and current date

The 2001 Misuse of Drugs Regulations act defines who is authorised to prescribe controlled drugs. It divided drugs of potential abuse into 5 categories ('schedules') each with own rules on prescribing, supply, possession, record keeping etc

Schedule 1	Cannabis, lysergide
Schedule 2	Diamorphine, morphine, pethidine, amphetamine, cocaine
Schedule 3	Barbiturates, buprenorphine, midazolam*, temazepam**
Schedule 4	<p>Part 1: Benzodiazepines (except midazolam and temazepam) and zolpidem</p> <p>Part 2: Androgenic and anabolic steroids, hCG, somatropin</p> <p>Controlled drug prescription requirements do not apply and Schedule 4 controlled drugs are not subject to safe custody requirements</p>
Schedule 5	Includes preparations which because of their strength are exempt from the vast majority of Controlled Drug requirements other than retention of

RCGP curriculum

3.2 - Patient Safety

[Curriculum statement](#)

External links

[UK Government](#)

Misuse of Drugs Regulations 2001

invoices (e.g. Oramorph 10mg/5ml)

Further selected points

- Schedule 2 and 3 drugs are marked 'CD' in the BNF
- a prescription for controlled drugs in Schedules 2,3 & 4 is valid for 28 days
- a pharmacist is generally not allowed to dispense unless all the information required by law is given. With Schedule 2 and 3 drugs a pharmacist is allowed to amend the prescription if 'it specifies the total quantity only in words or in figures or if it contains minor typographical errors, provided that such amendments are indelible and clearly attributable to the pharmacist making them'

*midazolam was changed from schedule 4 to 3 in 2008

**temazepam is excluded from the prescription requirements

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)


Questions 31 to 33 of 93



Theme: Consultation models

- A** Heron
- B** Kurtz and Silverman
- C** Berne
- D** Fraser
- E** Neighbour
- F** Balint
- G** Stott and Davis
- H** Helman's folk model
- I** Pendleton

For each of the following tasks select the consultation model most associated with it


31. Define the reason for the patient's attendance 

Pendleton

32. Use time and resources appropriately 

Heron

The correct answer is Pendleton

33. Opportunistic health promotion 

Heron

The correct answer is Stott and Davis

Question stats

Average score for registered users:

31		52.5%
32		47.2%
33		60.7%

Session score = 27.3%

RCGP curriculum

2 - The General Practice Consultation

[Curriculum statement](#)

Consultation models

Calgary-Cambridge observation guide- Kurtz and Silverman - 1996

- initiating the session
- gathering information
- building the relationship

- giving information, explaining and planning
- closing the session

Stewart - patient-centred clinical method - 1995. 2003

- exploring both the disease and the illness experience
- understanding the whole person
- finding common ground
- incorporating prevention and health promotion
- enhancing the doctor-patient relationship
- being realistic (with time and resources)

Pendleton - The Consultation: an Approach to Learning and Teaching - 1984, 2003

- define the reason for the patient's attendance (ideas, concerns and expectations)
- consider other problems
- with the patient, choose an appropriate action for each problem
- achieve a shared understanding of the problems with the patient
- involve the patient in the management and encourage him/her to accept appropriate responsibility
- use time and resources appropriately
- establish or maintain a relationship with the patient which helps to achieve the other tasks

Fraser - Areas of competence - 1992

- interviewing and history-taking
- physical examination
- diagnosis and problem-solving
- patient management
- relating to patients
- anticipatory care
- record keeping

Neighbour - The Inner Consultation - five checkpoint model - 1987

- connecting
- summarising
- handing over
- safety netting
- housekeeping

Tuckett - meeting of two experts - 1985

- the consultation is a meeting between two experts
- doctors are experts in medicine
- patients are experts in their own illnesses
- shared understanding is the aim
- doctors should seek to understand the patient's beliefs
- doctors should address explanations in terms of the patient's belief system

Stott and Davis - Exceptional potential of the consultation - 1979


- management of presenting problems
- management of continuing problems
- modification of help-seeking behaviour
- opportunistic health promotion

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 34 of 93


You see a 29-year-old man with asthma. He tells you he has come to see you today because one of the partners refuses to alter his inhaler therapy until he gives up smoking. He is currently using a salbutamol inhaler as required but is now having frequent episodes of wheeze and he has developed a nocturnal cough. What is the most appropriate action?

- A. Remove him from the practice list if he refuses to give up smoking
- B. Alter his inhaler treatment and raise it at the practice meeting
-  C. **Alter his inhaler treatment and speak to the doctor concerned**
- D. Refuse to alter his inhaler treatment until he has agreed to be referred to smoking cessation
- E. Alter his inhaler treatment and advise the patient to see you next time

Question stats

A	0.2%
B	8.6%
C	86.7%
D	1.5%
E	2.9%

86.7% of users answered this question correctly

Session score = 29.4%

Although continuing to smoke is clearly going to make his asthma control worse it is not a reason to withhold treatment from a patient. After being made aware of this you have duty to follow it up with the doctor concerned. This also allows the doctor to explain the consultation from his/her point of view. Raising this at the practice meeting is less ideal as it may appear confrontational.

Altering his inhaler treatment alone fails to address the issue of treatment being withheld. Refusing to alter his inhalers until he has agreed to be referred to smoking cessation is basically blackmail and not acceptable. Removing him from the practice list for not giving up smoking again is clearly wrong.

RCGP curriculum

4.1 - Management in Primary Care



[Curriculum statement](#)

Rate question:

Question 35 of 93



Which one of the following statements regarding the Yellow Card scheme is correct?

- A. Each Yellow Card requires two doctors to confirm the adverse event
- B. Online reporting is currently limited to vaccines
-  C. All adverse events should be reported, even for established drugs
-  D. Patients can complete Yellow Cards
- E. Only confirmed adverse events should be reported

Question stats

A	1.3%
B	2.9%
C	41.2%
D	50.8%
E	3.7%

50.8% of users answered this question correctly

Session score = 28.6%

Yellow Card scheme

The Yellow Card scheme has become the standard way to report adverse reactions to medications. It is run by the Medicines and Healthcare products Regulatory Agency (MHRA).

The following should be reported (taken from the MHRA website)

- all suspected adverse drug reactions for new medicines (identified by the black triangle symbol) should be reported
- all suspected adverse drug reactions occurring in children, even if a medicine

has been used off-label

- all serious* suspected adverse drug reactions for established vaccines and

medicines, including unlicensed medicines, herbal remedies, and medicines used off-label

Other information

- Yellow Cards are found at the back of the BNF or reports can be completed online (www.yellowcard.gov.uk)
- any suspected reactions (not just confirmed) should be reported
- patients can report adverse events
- Yellow Cards are sent to the MHRA who in collate and assess the information. In turn the MHRA may consult with the Commission on Human Medicines (CHM), an independent scientific advisory body on medicines safety

*reactions which are fatal, life-threatening, disabling or incapacitating, result in or prolong hospitalisation, or medically significant are considered serious.

Rate question:

RCGP curriculum

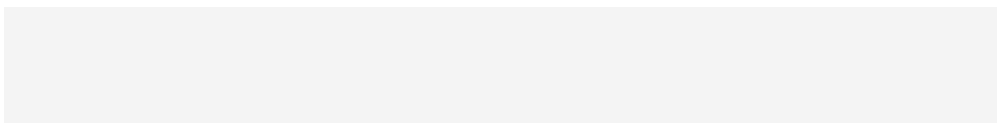
3.2 - Patient Safety

[Curriculum statement](#)

External links

[MHRA](#)

Yellow Card scheme





All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 36 of 93



A 49-year-old man with motor neuron disease asks for advice. He has read about the Mental Capacity Act and after discussion with his wife has decided he does not want to be ventilated in the event of respiratory failure. What is the most appropriate action to take?

- A. Advise that it is not possible to make orders relating to life-sustaining treatment
- B. Refer to psychiatrist for formal assessment of capacity
- C. Advise him to make his wife the lasting power of attorney
-  D. Advise that his wishes should be written, signed and witnessed
-  E. Make a record in the clinical notes

It is preferable that the patient makes a formal advance directive. Lasting power of attorney arrangements exclude decisions about life-sustaining treatments unless specifically mentioned

Mental Capacity Act

The Mental Capacity Act of 2005 came into force in 2007. It applies to adults over the age of 16 and sets out who can take decisions if a patient becomes incapacitated (e.g. following a stroke). Mental capacity includes the ability to make decisions affecting daily life, healthcare and financial issues.

The Act contains 5 key principles:

- A person must be assumed to have capacity unless it is established that he lacks capacity
- A person is not to be treated as unable to make a decision unless all practicable steps to help him to do so have been taken without success
- A person is not to be treated as unable to make a decision merely because he makes an unwise decision
- An act done, or decision made, under this Act for or on behalf of a person who lacks capacity must be done, or made, in his best interests
- Before the act is done, or the decision is made, regard must be had to whether the purpose for which it is needed can be as effectively achieved in a way that is less restrictive of the person's rights and freedom of action

Assessment of capacity

The Act sets out a clear test for assessing whether a person lacks capacity. It is a 'decision-specific' and 'time-specific' test. An adult can only be considered unable to make a particular decision if:

1. He or she has an 'impairment of, or disturbance in, the functioning of the mind or brain' whether permanent or temporary AND

Question stats

A	1.3%
B	1.1%
C	6.8%
D	83.1%
E	7.7%

83.1% of users answered this question correctly

Session score = 27.8%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

2. He or she is unable to undertake any of the following

- a. understand the information relevant to the decision
- b. retain that information
- c. use or weigh that information as part of the process of making the decision
- d. communicate the decision made by talking, sign language or other means

No individual can be labelled 'incapable' simply as a result of a particular medical condition. Section 2 of the Act makes it clear that a lack of capacity cannot be assumed by a person's age, appearance, or any condition or aspect of a person's behaviour

Best interests

The following should be considered when assessing what is in someone's best interests:

- 1. Whether the person is likely to regain capacity and can the decision wait.
- 2. How to encourage and optimise the participation of the person in the decision.
- 3. The past and present wishes, feelings, beliefs, values of the person and any other relevant factors
- 4. Views of other relevant people

Lasting Powers of Attorney (LPAs)

The Act allows a person to appoint an attorney to act on their behalf if they should lose capacity in the future, replacing the current Enduring Power of Attorney (EPA). In addition to property and financial affairs the Act also allows people to empower an attorney make health and welfare decisions. The attorney only has the authority to make decisions about life-sustaining treatment if the LPA specifies that. Before it can be used an LPA must be registered with the Office of the Public Guardian

Advance decisions

Advance decisions can be drawn up by anybody with capacity to specify treatments they would not want if they lost capacity. They may be made verbally unless they specify refusing life-sustaining treatment (e.g. Ventilation) in which case they need to be written, signed and witnessed to be valid. Advance decisions cannot demand treatment

Rate question:

Question 37 of 93



You are a GP registrar. It is Saturday morning and your neighbour asks you to have a look at their 4-year-old son. They think he may have an ear infection and wonder if he needs antibiotics. How should you respond?



A. Assess the child and prescribe if appropriate to avoid unnecessary use of NHS resources

B. Tell her it is inappropriate to ask a friend to see her son and suggest she takes him to A&E if she is worried



C. Explain that unfortunately it is not good practice to treat family or friends and suggest they take their son to the out-of hours service

D. Assess the child to make sure he is not acutely unwell but don't prescribe

E. Give him a 'delayed-prescription' to use if the child doesn't pick in the next 48 hours

Question stats

A	1.4%
B	1.2%
C	68.2%
D	28.7%
E	0.4%

68.2% of users answered this question correctly

Session score = 27%

It is bad practice to assess or treat family members or friends where this is avoidable. One of the primary reasons is that it may affect your clinical judgement. The most appropriate advice is to ask the neighbour to take his child to the out-of-hours service if they are concerned. This is a better response than telling the patient off and directing them to A&E. Firstly non-medics may not be aware of our professional guidance. If you lived next door to a plumber you may feel it reasonable for him to help if your pipes burst! Also, A&E is not the most appropriate place to send a child with a suspected ear infection.

Assessing the child is a poor response for the reasons given above. Giving a prescription without even assessing the child is a very poor option for many obvious reasons e.g. failure to exclude a serious illness, lack of knowledge of his past medical history and allergies etc.

—

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 38 of 93


How long should a patient stop driving for following an elective cardiac angioplasty?



- A. No restriction
- B. 1 week
- C. 2 weeks
- D. 4 weeks
- E. 8 weeks

DVLA advice following angioplasty - cannot drive for 1 week

DVLA: cardiovascular disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Specific rules

- angioplasty (elective) - 1 week off driving
- CABG - 4 weeks off driving
- acute coronary syndrome- 4 weeks off driving, 1 week if successfully treated by angioplasty
- angina - driving must cease if symptoms occur at rest/at the wheel
- pacemaker insertion - 1 week off driving
- implantable cardioverter-defibrillator: if implanted for sustained ventricular arrhythmia: cease driving for 6 months. If implanted prophylactically then cease driving for 1 month
- successful catheter ablation for an arrhythmia- 2 days off driving
- aortic aneurysm of 6cm or more - notify DVLA. Licensing will be permitted subject to annual review. An aortic diameter of 6.5 cm or more disqualifies patients from driving
- heart transplant: DVLA do not need to be notified

Rate question:
Question stats

A	3.7%
B	79.1%
C	6.1%
D	11%
E	0.2%

79.1% of users answered this question correctly

Session score = 26.3%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links



[DVLA](#)

Cardiovascular disorder guidelines

Question 39 of 93



You are a ST1 doctor working at the local genitourinary medicine clinic. A 16-year-old female patient is found to have *Chlamydia*. When she is called back in she refuses to give details of her previous or current partner. What is the most appropriate action?

- A. Refuse to treat her + contact her parents to help persuade her
- B. Give her a tablet of azithromycin to give to her partner
-  C. **Treat her and explore the reasons why she does not want to tell her previous or current partner**
-  D. **Treat her but tell her she risk infertility through re-infection if her partner is not treated**
- E. Refuse to treat her if she doesn't give you any details

Question stats

A	0.4%
B	2.1%
C	91%
D	6.5%
E	0.1%

91% of users answered this question correctly

Session score = 25.6%

The scenario looks at confidentiality and empathy.

A key concept here is to treat her regardless of whether she 'cooperates' and gives you the names of her previous partners. Refusing to treat her is blackmail and clearly unacceptable, as is breaking confidentiality and telling her parents.

The best response is to explore why she doesn't want to tell her previous or current partners. This may lead to a discussion where you are able to allay her fears. The second approach, whilst likely to represent a factual statement, is less likely to get to the bottom of the problem.

Giving her a tablet of azithromycin to give her partner is the worst option.

—

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 40 of 93



Plans for revalidation are currently being drawn up by the RCGP. How many learning credits will be required each year?



- A. 20
- B. 50
- C. 100
- D. 200
- E. 250

Question stats

A	6.3%
B	74%
C	11.4%
D	6.1%
E	2.2%

74% of users answered this question correctly

Session score = 25%

Revalidation

Revalidation introduces a change in the way doctors are licensed and certificated. Currently UK doctors automatically receive their licence to practise if they have paid their annual fee and have no limitations on their registration (e.g. Following a GMC ruling). To practise as a GP doctors must also be on the GP Register - a process known as certification.

Following the introduction of revalidation doctors will be required to prove their fitness to practise to allow them to continue to work as a doctor. Revalidation will occur every 5 years and in one process combine relicensing and recertification. Annual appraisals will continue as before but there will be a focus on whether the doctor is making sufficient progress towards their revalidation portfolio.

The type and amount of evidence required will be similar to that needed for appraisals currently. The RCGP is creating an ePortfolio for the process and proposes that it should contain the following (please see the link for more details):

- description of your work
- description of any special circumstances (e.g. Prolonged illness)
- details of previous appraisals
- current personal development plan
- review of previous personal development plans
- evidence of continuing professional development - at least 50 'learning credits' are required per year
- multi-source feedback
- patient questionnaire surveys
- significant event audits
- review of any formal complaints
- probity/health statements

Learning credits

- minimum of 1 credit for each hour of education
- however, if the hour of education can be shown to lead to improvements in

RCGP curriculum

3.1 - Clinical Governance

[Curriculum statement](#)

External links

[RCGP](#)

Revalidation

patient care then it will count as 2 credits

Submitting the evidence for revalidation

- the ePortfolio will be submitted electronically for review
- the review will be done by a 'Responsible Officer'
- the Responsible Officer is likely to be advised by a GP assessor and a trained lay person
- if the submitted evidence is considered sufficient the Responsible Officer will recommend to the GMC that the doctor is both relicensed and recertificated

Revalidation is due to be phased in from 2011 to 2016.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 41 of 93


A 53-year-old heavy goods vehicle driver with a history of type II diabetes mellitus is reviewed in the diabetes clinic. Despite maximal oral hypoglycaemic therapy his HbA1c is 9.7%. If insulin therapy is started then which one of the following is most appropriate with regards to his job?



- A. Cannot continue to drive heavy goods vehicle
- B. Inform DVLA and recommence driving once stable insulin dose achieved
- C. Can only drive during daylight hours
- D. As under 55 years of age then no requirement to inform DVLA
- E. Needs annual screening to exclude retinopathy or neuropathy

Patients on insulin cannot hold a HGV licence

The April 2009 AKT feedback report made specific mention of fitness to drive rules.

DVLA: diabetes mellitus

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles (HGVs) tend to be much stricter

Specific rules

- if on insulin then cannot hold HGV licence*
- if on insulin then patient can drive a car as long as they have hypoglycaemic awareness and no relevant visual impairment
- if on tablets, exenatide or gliptin no need to notify DVLA
- if diet controlled alone and no relevant complications (e.g. Maculopathy) then no requirement to inform DVLA

*there are complex exceptions to this rule, but these are not relevant for the purposes of the exam

Rate question:
Question stats

A	<div style="width: 81.1%;"></div>	81.1%
B	<div style="width: 15.1%;"></div>	15.1%
C	<div style="width: 0.4%;"></div>	0.4%
D	<div style="width: 0.2%;"></div>	0.2%
E	<div style="width: 3.2%;"></div>	3.2%

81.1% of users answered this question correctly

Session score = 24.4%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DVLA](#)

Diabetes mellitus guidelines

Questions 42 to 44 of 93



Theme: Evidenced-based recovery times

- A** Less than 1 week
- B** 1 - 2 weeks
- C** 2 - 3 weeks
- D** 4 - 5 weeks
- E** 7 weeks
- F** 9 weeks
- G** 3 months

For each one of the following procedures select the most appropriate recovery time for a person of working age:

42. Abdominal hysterectomy



Less than 1 week

The correct answer is 7 weeks

43. Laparoscopic inguinal hernia repair



Less than 1 week

The correct answer is 1 - 2 weeks

44. Laparoscopic cholecystectomy



Less than 1 week

The correct answer is 2 - 3 weeks

Question stats

Average score for registered users:

42		30.1%
43		65.3%
44		36.4%

Session score = 22.7%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Department of Work and Pensions](#)

Evidenced-based recovery times

Evidenced-based recovery times

The Department for Works and Pensions has produced evidence-based recovery times which certifying medical practitioners should consider when advising patients of working age

Procedure	Recovery time	
	Laparoscopic	Open

Abdominal/groin hernia	1 - 2 weeks	2 - 3 weeks
Appendicectomy	1 - 2 weeks	2 - 3 weeks
Cholecystectomy	2 - 3 weeks	3 - 5 weeks
Hysterectomy	3 weeks (laparoscopic-assisted vaginal)	7 weeks (abdominal)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 45 of 93



Which one of the following consultation models advocates managing the presenting complaint, managing ongoing health problems and modifying health seeking behaviour?

- A. Neighbour
- B. Fraser
- C. Pendleton
- D. Stott and Davis
- E. Stewart



Question stats

A	4.1%
B	12.3%
C	15.4%
D	59.8%
E	8.5%

59.8% of users answered this question correctly

Session score = 22.2%

Consultation models

Calgary-Cambridge observation guide- Kurtz and Silverman - 1996

- initiating the session
- gathering information
- building the relationship
- giving information, explaining and planning
- closing the session

Stewart - patient-centred clinical method - 1995. 2003

- exploring both the disease and the illness experience
- understanding the whole person
- finding common ground
- incorporating prevention and health promotion
- enhancing the doctor-patient relationship
- being realistic (with time and resources)

Pendleton - The Consultation: an Approach to Learning and Teaching - 1984, 2003

- define the reason for the patient's attendance (ideas, concerns and expectations)
- consider other problems
- with the patient, choose an appropriate action for each problem
- achieve a shared understanding of the problems with the patient
- involve the patient in the management and encourage him/her to accept appropriate responsibility
- use time and resources appropriately
- establish or maintain a relationship with the patient which helps to achieve the other tasks

Fraser - Areas of competence - 1992

RCGP curriculum

2 - The General Practice Consultation

[Curriculum statement](#)

- interviewing and history-taking
- physical examination
- diagnosis and problem-solving
- patient management
- relating to patients
- anticipatory care
- record keeping

Neighbour - The Inner Consultation - five checkpoint model - 1987

- connecting
- summarising
- handing over
- safety netting
- housekeeping

Tuckett - meeting of two experts - 1985

- the consultation is a meeting between two experts
- doctors are experts in medicine
- patients are experts in their own illnesses
- shared understanding is the aim
- doctors should seek to understand the patient's beliefs
- doctors should address explanations in terms of the patient's belief system

Stott and Davis - Exceptional potential of the consultation - 1979

- management of presenting problems
- management of continuing problems
- modification of help-seeking behaviour
- opportunistic health promotion

Rate question:

Question 46 of 93



After requesting his own medical records a patient attends surgery. He is angry one of your colleagues documented in the notes that 'it is my opinion his ongoing joint symptoms are somatic ?refer psych'. He asks for this entry to be deleted from his records. What is the most appropriate action?

- A. Advise no further action until the patient has seen a rheumatologist
- B. Organise a case conference including a psychiatrist and a representative from the local Patient's Association
- C. Delete the entry + carefully record why it was deleted
- D. Delete any opinion based comments from that earlier entry
- E. **Keep the entry + record the patient's objection**



Question stats

A	1.4%
B	1.7%
C	12.9%
D	2.5%
E	81.6%

81.6% of users answered this question correctly

Session score = 21.7%

The previous doctor recorded an accurate entry regarding his clinical impression at the time. Before a definitive diagnosis is reached there is nothing to stop a doctor recording his clinical impression / line-of-thinking. Even if the patient is ultimately diagnosed with an organic problem this does not mean that the original entry was invalid.

This should be explained to the patient but there is no reason to delete this entry.

Data Protection Act

The 1998 Data Protection Act is the main piece of legislation that governs the protection of personal data in the UK. The Act covers both manual and computerised records.

There are 8 main principles of the Data Protection Act:

- data must be used for the specific purpose it was collected
- data must not be disclosed to other parties without the consent of the individual whom it is about
- individuals have a right of access to the information held about them
- personal information may be kept for no longer than is necessary and must be kept up-to-date
- personal information may not be transmitted outside the European Union unless consent has been given
- all entities (e.g. a GP surgery) that process personal information must register with the Information Commissioner's Office
- adequate security measures must be in place. Those include technical measures (e.g. passwords, firewalls) and organisational measures (e.g. staff training)
- subjects (i.e. patients) have the right to have factually incorrect information about them corrected

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Information Commissioner's Office](#)

Guidelines on recording opinions

Rate question:

Question 47 of 93


Which one of the following statements regarding the registration and recording of controlled drugs is correct?

- A. The reason for administering the drug must be recorded each time a controlled drug is issued
- B. Must be kept for a minimum of 12 months after the date of the last entry
- C. Schedule 3 drugs must be recorded
- ✓ D. **Computerised records are acceptable**
- E. The senior partner is responsible for the receipt and supply of CDs from each doctor's bag

Question stats

A	8.9%
B	15.6%
C	13.4%
D	59.7%
E	2.3%

59.7% of users answered this question correctly

Session score = 21.3%

Controlled drugs: storage and register
Storage

In the surgery controlled drugs (CDs) should be stored in a locked cabinet.

Controlled drugs outside of the surgery must be stored in a locked receptacle (combination lock or key). A doctor's bag with a lock is acceptable. It should be noted that storing a controlled drug in a locked car boot is not acceptable.

Register

A register must be kept for the supply of Schedule 2 drugs.

Specific requirements of the register:

- must be bound rather than loose leaved. Computerised records are acceptable as long as they are secure and auditable
- each drug should have its own individual section
- entries should be chronological and made in indelible ink
- the following information should be recorded when receiving CDs: date, name and address of the supplier, quantity received, name, form and strength
- the following information should be recorded when supplying CDs (either to patients or practitioners): date, name and address of the person receiving the CD, person who prescribed or ordered the CD, quantity supplied, name, form and strength
- must be kept for a minimum of 2 years after the date of the last entry

For doctor's bags a separate CD register should be kept for the CD stock held within that bag. The individual doctor is responsible for the receipt and supply of CDs from their own bag.

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 48 of 93


A pregnant woman asks for advice about flying. What is the latest time in her pregnancy that she may fly, presuming an uncomplicated pregnancy with no change in the estimated date of delivery?

- A. 24 weeks
- B. 28 weeks
- C. 32 weeks
- D. 36 weeks
- E. 38 weeks



Fitness to fly - pregnancy - up to 36 weeks

Fitness to fly

The Civil Aviation Authority (CAA) has issued guidelines on air travel for people with medical conditions; please see the link provided.

Cardiovascular disease

- unstable angina, uncontrolled hypertension, uncontrolled cardiac arrhythmia, decompensated heart failure, severe symptomatic valvular disease: should not fly
- uncomplicated myocardial infarction: may fly after 7-10 days
- complicated myocardial infarction: after 4-6 weeks
- coronary artery bypass graft: after 10-14 days
- percutaneous coronary intervention: after 5 days

Respiratory disease

- pneumonia: should be 'clinically improved with no residual infection'
- pneumothorax: absolute contraindication, the CAA suggest patients may travel 2 weeks after successful drainage if there is no residual air. The British Thoracic Society used to recommend not travelling by air for a period of 6 weeks but this has now been changed to 1 week post check x-ray

Pregnancy

- most airlines do not allow travel after 36 weeks for a single pregnancy and after 32 weeks for a multiple pregnancy
- most airlines require a certificate after 28 weeks confirming that the pregnancy is progressing normally

Question stats

A	1.4%
B	7.1%
C	23.5%
D	66.9%
E	1%

66.9% of users answered this question correctly

Session score = 20.8%

RCGP curriculum

10.1 - Women's Health

[Knowledge](#)

[Curriculum statement](#)

External links

[Civil Aviation Authority](#)

Fitness to fly guidelines

Surgery

- travel should be avoided for 10 days following abdominal surgery
- laparoscopic surgery: after 24 hours
- colonoscopy: after 24 hours
- following the application of a plaster cast, the majority of airlines restrict flying for 24 hours on flights of less than 2 hours or 48 hours for longer flights

Haematological disorders

- patients with a haemoglobin of greater than 8 g/dl may travel without problems (assuming there is no coexisting condition such as cardiovascular or respiratory disease)

Rate question:

?

Rate question:

Question stats

Category	Percentage
A	9.8%
B	10.6%
C	6.5%
D	40.7%
E	32.4%

40.7% of users answered this question correctly

Session score = 20.4%

4.1 - Management in Primary Care

Question 50 of 93



A 34-year-old woman with ulcerative colitis asks for advice about applying for an annual pre-payment certificate. The patient lives in Birmingham. What is the minimum number of prescriptions which she would need to obtain in a year to make it economical?

- A. More than 7
- B. More than 10
- ✓ C. More than 14
- D. More than 22
- E. More than 28

Question stats

A	8.1%
B	10.9%
C	77%
D	2.4%
E	1.6%

77% of users answered this question correctly

Session score = 20%

Prescription charges

The following information applies to England. Wales has abolished prescription charges and Scotland plans to remove prescription charges altogether by 2011.

Who is entitled to free prescriptions?

- children (< 16 years old)
- aged 16, 17 or 18 and in full-time education
- elderly (aged 60 or over)
- if the patient or their partner receives: income support or jobseeker's allowance
- if the patient has a prescription exemption certificate

Prescription exemption certificate

Women who are pregnant or have had a child in the past year are entitled to free prescriptions after the issuing of a prescription exemption certificate. Patients who have the following chronic medical conditions are also entitled:

- hypoparathyroidism
- hypoadrenalism for which specific substitution therapy is essential (e.g. Addison's Disease)
- diabetes insipidus and other forms of hypopituitarism
- diabetes mellitus except where treatment is by diet alone
- myasthenia gravis
- hypothyroidism requiring thyroid hormone replacement
- epilepsy requiring continuous anti-convulsive therapy
- a permanent fistula requiring continuous surgical dressing or requiring an appliance
- undergoing treatment for cancer. This includes treatment for the effects of cancer or for the effects of cancer treatments

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Pre-payment certificate

Pre-payment certificates (PPC) are for patients not entitled to free prescriptions but who receive frequent prescriptions. They are cheaper if the patient pays for more than 14 prescriptions per year

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 51 of 93



Which one of the following statements regarding Lasting Powers of Attorney, as defined by the 2005 Mental Capacity Act, is incorrect?



- A. **Makes decisions on financial but not healthcare or welfare matters**
- B. Must be registered with the Office of the Public Guardian
- C. An attorney only has the authority to make decisions about life-sustaining treatment if the LPA specifies that
- D. Replaces the current Enduring Power of Attorney
- E. Allows a person to appoint an attorney to act on their behalf if they should lose capacity in the future

Question stats

A	<div style="width: 70.1%;"></div>	70.1%
B	<div style="width: 5.1%;"></div>	5.1%
C	<div style="width: 13%;"></div>	13%
D	<div style="width: 5.6%;"></div>	5.6%
E	<div style="width: 6.2%;"></div>	6.2%

70.1% of users answered this question correctly

Session score = 19.6%

Mental Capacity Act

The Mental Capacity Act of 2005 came into force in 2007. It applies to adults over the age of 16 and sets out who can take decisions if a patient becomes incapacitated (e.g. following a stroke). Mental capacity includes the ability to make decisions affecting daily life, healthcare and financial issues.

The Act contains 5 key principles:

- A person must be assumed to have capacity unless it is established that he lacks capacity
- A person is not to be treated as unable to make a decision unless all practicable steps to help him to do so have been taken without success
- A person is not to be treated as unable to make a decision merely because he makes an unwise decision
- An act done, or decision made, under this Act for or on behalf of a person who lacks capacity must be done, or made, in his best interests
- Before the act is done, or the decision is made, regard must be had to whether the purpose for which it is needed can be as effectively achieved in a way that is less restrictive of the person's rights and freedom of action

Assessment of capacity

The Act sets out a clear test for assessing whether a person lacks capacity. It is a 'decision-specific' and 'time-specific' test. An adult can only be considered unable to make a particular decision if:

1. He or she has an 'impairment of, or disturbance in, the functioning of the mind or brain' whether permanent or temporary AND
2. He or she is unable to undertake any of the following
 - a. understand the information relevant to the decision

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

- b. retain that information
- c. use or weigh that information as part of the process of making the decision
- d. communicate the decision made by talking, sign language or other means

No individual can be labelled 'incapable' simply as a result of a particular medical condition. Section 2 of the Act makes it clear that a lack of capacity cannot be assumed by a person's age, appearance, or any condition or aspect of a person's behaviour

Best interests

The following should be considered when assessing what is in someone's best interests:

- 1. Whether the person is likely to regain capacity and can the decision wait.
- 2. How to encourage and optimise the participation of the person in the decision.
- 3. The past and present wishes, feelings, beliefs, values of the person and any other relevant factors
- 4. Views of other relevant people

Lasting Powers of Attorney (LPAs)

The Act allows a person to appoint an attorney to act on their behalf if they should lose capacity in the future, replacing the current Enduring Power of Attorney (EPA). In addition to property and financial affairs the Act also allows people to empower an attorney make health and welfare decisions. The attorney only has the authority to make decisions about life-sustaining treatment if the LPA specifies that. Before it can be used an LPA must be registered with the Office of the Public Guardian

Advance decisions

Advance decisions can be drawn up by anybody with capacity to specify treatments they would not want if they lost capacity. They may be made verbally unless they specify refusing life-sustaining treatment (e.g. Ventilation) in which case they need to be written, signed and witnessed to be valid. Advance decisions cannot demand treatment

Rate question:

Question 52 of 93



Whilst speaking to one of the senior partners at your GP surgery you notice the smell alcohol on his breath. What is the most appropriate course of action?



- A. Explain to him your concerns and ask him if he has been drinking alcohol
- B. Contact your Medical Indemnity Provider for advice
- C. Discuss your concerns with the other partners in the surgery
- D. Call the police
- E. Use the CAGE screening tool to assess whether he is an alcoholic

The most appropriate response is to directly challenge your colleague about your concerns. As a doctor you have a duty of care to protect patients – a doctor under the influence of alcohol is a potential danger to patients. The next best option is to discuss your concerns with one of the other partners. This would hopefully result in the same action being taken but following a delay.

Phoning your Medical Indemnity Provider is not really necessary as the correct course of action is clear. They would however hopefully advise you on the correct course of action. By using the CAGE screening tool you are starting to act as your colleagues doctor which is not appropriate. If they have a problem with alcohol they need to see their own GP. Although drinking alcohol whilst practising medicine is dangerous and unprofessional is it not a direct matter for the police.

The GMC state the following:

'You should follow the advice in Good Medical Practice in relation to your own health. You should also:

- protect those you manage from risks to their health
- protect patients from risks arising from your own or your colleagues' health
- respond constructively to signs that colleagues have health problems; in particular you
- should be alive to mental health problems, depression, and alcohol and drug dependence
- help and support colleagues who have health problems.'

—

Rate question:

Question stats

A	<div style="width: 86.5%;"></div>	86.5%
B	<div style="width: 2.1%;"></div>	2.1%
C	<div style="width: 11%;"></div>	11%
D	<div style="width: 0.1%;"></div>	0.1%
E	<div style="width: 0.3%;"></div>	0.3%

86.5% of users answered this question correctly

Session score = 19.2%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Questions 53 to 55 of 93



Theme: Consultation models

- A** Heron
- B** Byrne and Long
- C** Berne
- D** Fraser
- E** Neighbour
- F** Calgary-Cambridge
- G** Stott and Davis
- H** Helman's folk model
- I** Pendleton

For each of the following tasks select the consultation model most associated with it

53. Anticipatory care



Heron

The correct answer is Fraser

54. Modification of help-seeking behaviour



Heron

The correct answer is Stott and Davis

55. Giving information, explaining and planning



Heron

The correct answer is Calgary-Cambridge

Question stats

Average score for registered users:

53		40.1%
54		61.8%
55		44.5%

Session score = 18.2%

RCGP curriculum

2 - The General Practice Consultation

[Curriculum statement](#)

Consultation models

Calgary-Cambridge observation guide- Kurtz and Silverman - 1996

- initiating the session
- gathering information
- building the relationship

- giving information, explaining and planning
- closing the session

Stewart - patient-centred clinical method - 1995. 2003

- exploring both the disease and the illness experience
- understanding the whole person
- finding common ground
- incorporating prevention and health promotion
- enhancing the doctor-patient relationship
- being realistic (with time and resources)

Pendleton - The Consultation: an Approach to Learning and Teaching - 1984, 2003

- define the reason for the patient's attendance (ideas, concerns and expectations)
- consider other problems
- with the patient, choose an appropriate action for each problem
- achieve a shared understanding of the problems with the patient
- involve the patient in the management and encourage him/her to accept appropriate responsibility
- use time and resources appropriately
- establish or maintain a relationship with the patient which helps to achieve the other tasks

Fraser - Areas of competence - 1992

- interviewing and history-taking
- physical examination
- diagnosis and problem-solving
- patient management
- relating to patients
- anticipatory care
- record keeping

Neighbour - The Inner Consultation - five checkpoint model - 1987

- connecting
- summarising
- handing over
- safety netting
- housekeeping

Tuckett - meeting of two experts - 1985

- the consultation is a meeting between two experts
- doctors are experts in medicine
- patients are experts in their own illnesses
- shared understanding is the aim
- doctors should seek to understand the patient's beliefs
- doctors should address explanations in terms of the patient's belief system

Stott and Davis - Exceptional potential of the consultation - 1979

- management of presenting problems
- management of continuing problems
- modification of help-seeking behaviour
- opportunistic health promotion

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 56 of 93



You are a GP registrar doing a 12 month placement in General Practice. Whilst using one of the partners room for a surgery you notice a half-empty bottle of whisky in the desk drawer. After discussing this with the partner he states that it was a recent gift from a patient and was simply storing it there prior to taking it home. What is the most appropriate course of action?



- A. Document your concerns in an anonymous letter to the practice manager
- B. Discuss this with one of the other partners in the surgery
- C. Fill in a clinical incident form
- D. Take no further action
- E. Take the bottle from the room and dispose of it

Question stats

A	1.5%
B	86.2%
C	1.7%
D	10.2%
E	0.4%

86.2% of users answered this question correctly

Session score = 17.9%

In this situation you have already discussed your concerns about alcohol with the doctor but he has denied there is a problem. Of course GPs receive gifts of alcohol frequently and his explanation may be valid. However, given that the bottle is half-empty it is necessary to share your concerns with other doctors in the surgery. They may already be aware of an existing problem and this may provide more 'evidence' for them to take appropriate action. The doctor may also be more willing to admit a problem to a fellow partner rather than a junior colleague such as yourself.

Filling in a clinical incident form will at least formally document your concerns but does not address the problem immediately. Writing an anonymous letter to the practice manager is unprofessional and likely to cause conflict, for example he may suspect one of the other partners wrote the letter.

Removing the bottle does not address the underlying problem. By taking no further action you are potentially exposing patients to ongoing risk – this is clearly the least acceptable option.

—

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 57 of 93


What is the youngest age that allows the term 'Old age' to be written on the death certificate?

- A. 65 years
- B. 70 years
- C. 75 years
- D. 80 years**
- E. 85 years



Death certification - 'Old age' only after 80 years

Question stats

A	1.4%
B	1.8%
C	6.9%
D	73.5%
E	16.5%

73.5% of users answered this question correctly

Session score = 19.3%

Death certification

There is no legal definition of death in the UK although guidelines exist. Current guidance states 'death should be verified by a doctor, or other suitably qualified personnel' which means staff such as nurse practitioners may verify (but not certify) death.

After a patient has died a doctor needs to complete a medical certificate of cause of death (MCCD). There is a list of circumstances in which a doctor should notify the Coroner prior to completing the MCCD.

Some specific points on completing the MCCD:

- 'old age' as 1a is only acceptable if the patient was at least 80 years of age . It can be used if certain conditions are met but is discouraged
- 'natural causes' is not acceptable
- organ failure (e.g. 'liver failure') can only be used if you specify the disease or

condition that led to the organ failure (e.g. 1b: Hepatitis C)

- abbreviations should be avoided (except HIV and AIDS*)

The family then take the MCCD to the local Registrar of Births, Deaths, and Marriages office to register the death. If the Registrar decides that the death does not need reporting to the Coroner he/she will issue:

- certificate for Burial or Cremation
- certificate of Registration of Death (for Social Security purposes)
- if requested. Copies of the Death Register (banks and insurance companies expect to see them)

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Home Office](#)

Guidance for doctors completing Medical Certificates

[Ministry of Justice](#)

Cremation guidelines

If the family would like the burial to be outside of England, an Out of England Order is needed from the coroner.

*why this is I'm not sure - probably due to how well known the terms are amongst the general public

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 58 of 93



A 38-year-old Pakistani man becomes unwell whilst visiting the UK. Which one of the following is provided to anyone, free of charge, regardless of their eligibility for NHS treatment?



- A. Surgery for a broken wrist
- B. **Compulsory psychiatric treatment**
- C. Outpatient treatment of HIV
- D. Angioplasty for acute myocardial infarction
- E. Medication for hypothyroidism

Question stats

A	<div></div>	3.2%
B	<div></div>	77.8%
C	<div></div>	9.3%
D	<div></div>	7.7%
E	<div></div>	1.8%

77.8% of users answered this question correctly

Session score = 19%

NHS treatment eligibility

Primary care

People are eligible for primary care if they are 'ordinarily resident' in the UK. Contrary to popular belief it is not related to National Insurance contributions or nationality. This generally means they will be in the UK for at least 6 months but it should be noted that there is no qualifying period (i.e. People are entitled to care if they expect to be in the UK for 6 months). This would exclude people who have emigrated but return every so often for free NHS care. Refugees are regarded as ordinarily resident.

Secondary care

The following hospital treatment is free of charge for everyone who needs it, regardless of how long they have been or intend to stay in the UK:

- contraception
- accident and emergency department treatment (excludes emergency treatment given elsewhere in the hospital)
- compulsory psychiatric treatment
- treatment for certain communicable diseases, e.g. Tuberculosis, malaria and meningitis. Testing for HIV is free of charge, but any subsequent treatment may have to be paid for

Visitors can receive NHS hospital treatment free of charge if the need for treatment arose during their visit to the UK and:

- person is a national of an European Economic Area (EEA) country* or Switzerland
- person normally lives abroad, and is receiving a UK state pension, and has lived in the UK in the past for at least ten years
- person has lived in the UK for at least ten years in the past, but now lives in an EEA state, or in a non-EEA state with which the UK has a reciprocal

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Department of Health](#)

Eligibility for free hospital treatment under the NHS

agreement

- person is a national, or a resident of certain non-EEA countries, with which the UK has a reciprocal agreement.

*European Union countries plus Liechtenstein, Iceland and Norway

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 59 of 93



Which one of the following statements regarding the Delphi method is correct?



- A. There should be at least five rounds
- B. It is preferable if the panel size is less than 10
- C. One of the key features is the anonymity of the participants
- D. The panel should meet after each round to discuss the findings
- E. Is not a suitable method for developing evidenced-based guidelines

There is no reason why the size of the panel should be limited, other than resource limitations. It has been suggested that the minimum number of people should be seven.

Delphi process

A Delphi process (also known as the Delphi method or technique) is a structured way of collecting and distilling the knowledge from a group of experts, often about issues where there is little formal evidence.

It consists of a number of 'rounds' of questionnaires. The first round tends to ask the experts a number of broad questions. The results of the first round are then sorted and common themes are distilled down. This information then goes on to form the second, more specific, questionnaire which again is sent out to the panel of experts. This iterative process is usually repeat two or three times.

Examples of where the Delphi method may be used:

- curriculum development: i.e. Involving a range of expert stakeholders in finding out what they feel should be included
- guideline development: the expert panel may include doctors, nurses, pharmacists and patients
- forecasting future health problems

One of the key features of a Delphi process is the anonymity of the participants. This prevents individual participants from dominating the opinion forming process.

Please see the link for an excellent review by Dr Thangaramtinum and Mr Redman.

Rate question:

Question stats

A	6.1%
B	4.5%
C	53.9%
D	22%
E	13.5%

53.9% of users answered this question correctly

Session score = 18.6%

RCGP curriculum

3.6 - Research and Academic Activity

[Curriculum statement](#)

External links

[RCOG](#)

The Delphi technique

Question 60 of 93


A 15-year-old boy sustains an undisplaced fracture of his tibial shaft whilst skiing in Italy. He has a cast applied and is discharged. The flight time home is approximately 3 hours. How soon can he fly home?

- A. 5 days after the cast is applied
- B. 7 days after the initial injury
- ✓ C. 48 hours after the cast is applied
- D. 24 hours after the cast is applied
- E. 72 hours after the initial injury

Question stats

A	1.5%
B	0.9%
C	74.8%
D	21.3%
E	1.5%

74.8% of users answered this question correctly

Session score = 18.3%

Fitness to fly

The Civil Aviation Authority (CAA) has issued guidelines on air travel for people with medical conditions; please see the link provided.

Cardiovascular disease

- unstable angina, uncontrolled hypertension, uncontrolled cardiac arrhythmia, decompensated heart failure, severe symptomatic valvular disease: should not fly
- uncomplicated myocardial infarction: may fly after 7-10 days
- complicated myocardial infarction: after 4-6 weeks
- coronary artery bypass graft: after 10-14 days
- percutaneous coronary intervention: after 5 days

Respiratory disease

- pneumonia: should be 'clinically improved with no residual infection'
- pneumothorax: absolute contraindication, the CAA suggest patients may travel 2 weeks after successful drainage if there is no residual air. The British Thoracic Society used to recommend not travelling by air for a period of 6 weeks but this has now been changed to 1 week post check x-ray

Pregnancy

- most airlines do not allow travel after 36 weeks for a single pregnancy and after 32 weeks for a multiple pregnancy
- most airlines require a certificate after 28 weeks confirming that the pregnancy is progressing normally

Surgery

- travel should be avoided for 10 days following abdominal surgery

External links

[Civil Aviation Authority](#)
Fitness to fly guidelines

- laparoscopic surgery: after 24 hours
- colonoscopy: after 24 hours
- following the application of a plaster cast, the majority of airlines restrict flying for 24 hours on flights of less than 2 hours or 48 hours for longer flights

Haematological disorders

- patients with a haemoglobin of greater than 8 g/dl may travel without problems (assuming there is no coexisting condition such as cardiovascular or respiratory disease)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 61 of 93



You are advising a widow on the benefits she is entitled to following the death of her husband. What is the qualifying age range for Bereavement Allowance in this situation?

- A. If her husband was < 65 years old at the time of death
- B. If she is < 60 years old at the time of her husband's death
- C. If her husband was > 65 years old at the time of death
- D. If she is 45 - 60 years old at the time of her husband's death
- E. If her husband was 45 - 65 years old at the time of death



Question stats

A	12.5%
B	14.2%
C	3.5%
D	56.7%
E	13.1%

56.7% of users answered this question correctly

Session score = 18%

Benefits: bereavement

Whilst GPs are not supposed to be experts on claimable benefits, a rough understanding is expected

Funeral payment	One-off payment to the partner or parent of the deceased if they are on benefits to help pay for a funeral
Bereavement payment	Lump sum given to spouse if they are under the state pension age when their partner died Depends on national insurance contributions Not payable to divorcees
Bereavement allowance	Taxable weekly benefit paid to the spouse for up to 52 weeks from the date of death, if the surviving partner is 45 years or older and less than the state pension age
Widowed Parent's Allowance	Payable to a parent whose husband or wife has died. Eligibility <ul style="list-style-type: none"> surviving partner is bringing up a child < 19 years of age and receiving child benefit deceased partner had made adequate national insurance contributions also if the woman was expecting her late husband's baby divorcees and those who remarry and not eligible to claim

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DirectGov](#)
Bereavement benefits

Rate question:

Question 62 of 93


Which one of the following statements regarding the Carr-Hill formula is incorrect?

- A. Is adjusted to take account of the number of new registrations
- B. Is adjusted to take account of staff market forces
- C. Patients over the age of 85 years have the highest adjustment factor
- D. Is used to adjust the global sum total for demographic and other factors
- ✓ E. Is due to be replaced by the Jarman index

The Carr-Hill formula replaced the Jarman index, rather than the other way around

GP contract: Carr-Hill formula

The Carr-Hill allocation formula is used to adjust the global sum total for a number of local demographic and other factors which may affect Practice workload. For example, a Practice with a large number of elderly patients may have a higher workload than one which primarily cares for commuters. The Carr-Hill formula replaced the Jarman index

Factors included in the Carr-Hill formula

- age and sex of patients
- nursing and residential home patients
- list turnover: adjusted for number of new registrations
- additional needs: Standardised Mortality Ratio and Standardised Long-Standing Illness for patients under the age of 65 years
- staff market forces factor
- rurality
- London weighting

Rate question:

Question stats

A	5.1%
B	15.2%
C	10.5%
D	16.3%
E	53%

53% of users answered this question correctly

Session score = 17.7%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 63 of 93



You are a GP registrar. A mother brings her 2-year-old child into surgery. She is concerned about his frequent bouts of coughing and wheezing. Whenever the child has been seen the clinical impression has been viral-induced wheeze. Plotting his growth shows he is consistently on the 50th centile for both height and weight. It transpires that the mother is concerned about cystic fibrosis. She demands a referral to a paediatrician for further tests. Despite extensive discussions she is still concerned. What is the most appropriate action?

- A. Advise her to see one of the senior GPs for a second opinion
- B. Tell her she should pay for a private referral
- C. Politely refuse explaining it is your decision about management
- D. Remove her from the practice list
- E. Refer her to a paediatrician



Question stats

A		21.1%
B		0.2%
C		2.6%
D		0%
E		76.1%

76.1% of users answered this question correctly

Session score = 17.5%

This is a situation that requires a balanced approach. As a principle doctors are of course free to make decisions regarding management and are not obliged to follow patient requests. However, the mother clearly has concerns about her child. Such concerns should always be acknowledged and taken seriously, not least because parents know their children best and are often right.

If a mother cannot be reassured about her child then the best course of action is to refer to paediatrics. Advising her to see a colleague may be an option, particularly if the doctor has an interest in paediatrics, but is unlikely to reassure her given the concerns about cystic fibrosis.

Refusing to refer the child is likely to lead to ongoing anxiety. Telling her to pay for a private referral is a poor option as it gives the impression that the child would benefit from review but that you are not willing to do it on the NHS.

Disagreements with patients about management are not grounds for practice list removal.

—

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Questions 64 to 66 of 93



Theme: DVLA: visual disorders

- A** Can never drive
- B** Consultant opinion required
- C** Must notify DVLA
- D** No driving until visual fields assessed
- E** Cannot drive alone
- F** No need to inform the DVLA

For each of the following scenarios select the most appropriate advice regarding driving a car:

- 64.** A patient with acromegaly is found to have a degree of bitemporal hemianopia.



Can never drive

The correct answer is No driving until visual fields assessed

- 65.** A patient who has an nucleation for an ocular tumour. The acuity and visual fields in the remaining eye are normal.



Can never drive

The correct answer is Must notify DVLA

- 66.** A patient with blepharospasm.



Can never drive

The correct answer is Consultant opinion required

Question stats

Average score for registered users:

64		66.8%
65		50.5%
66		39.2%

Session score = 16.7%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DVLA](#)

DVLA guidelines

DVLA: visual disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Visual field defects

- driving must cease unless confirmed able to meet recommended national

guidelines for visual field

Monocular vision

- must notify DVLA
- may drive if acuity and visual field is normal in the remaining eye

Blepharospasm

- consultant opinion is required

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 67 of 93



Which one of the following statements regarding the Statement of Fitness for Work is correct?

- A. Before completing the statement there must be at least one face-to-face consultation with a doctor
- B. A small administration fee may be charged for issuing lost copies of the statement
- C. You cannot complete a note following the assessment of a Nurse Practitioner
- ✓ D. The advice you offer on returning to work may be ignored by employers
- E. Other significant past medical history should be included on the form

Question stats

A		4.9%
B		6.4%
C		15.6%
D		68.3%
E		4.9%

68.3% of users answered this question correctly

Session score = 16.4%

Statement of Fitness for Work

In 2010 sick notes became fit notes, or more formally the Statement of Fitness for Work. They have been introduced to reflect the fact that in the majority of cases patients do not need to be 100% fit before returning to work. The major change is allowing a doctor to advise that a patient 'may be fit for work taking account of the following advice'.

This information is taken from the Department of Work and Pensions website. Please see the link for further details.

Other changes

- the Statement of Fitness for Work replaces the Med3 and Med5 in one form
- the Med4, Med6 and RM 7 forms have been withdrawn due to the replacement of Incapacity Benefit with the Employment and Support Allowance
- telephone consultations are now an acceptable form of assessment
- there is no longer a box to say a patient is fit for work. There is however an option to state if you need to assess your patient's fitness for work again at the end of the statement period
- there is increased space for comments on the functional effects of the condition, including tick boxes for simple things that may help a patient back to work
- during the first 6 months of an illness the new statement can be issued for no longer than 3 months.. After this time it may be issued for an indefinite period

Things that stay the same

- can only be completed by a doctor
- you can still the advise a patient that they are not fit for work (of any type)

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Department of Work and Pensions](#)

Statement of Fitness for Work

- the advice on the statement is not binding on employers

The statement may be issued:

- on the day that you assessed the patient
- on a date after you assessed your patient if you consider that it would have been reasonable to issue a statement on the day of the assessment
- after consideration of a written report from another doctor or registered health care professional

There are 4 'tick boxes' included on the form which represent common approaches to aid a return to work. One or more may be ticked. Other approaches can be suggested in the comments box. The options are:

- a phased return to work
- altered hours
- amended duties
- workplace adaptations

Patients may self-certify for the first 7 calendar days:

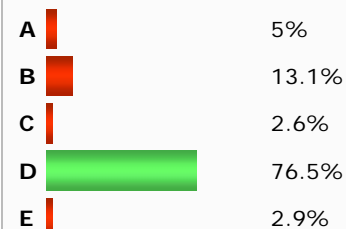
SC1	Self-certification, for patients not eligible to claim statutory sick pay (e.g. Unemployed or self-employed). For the first 7 calendar days of an illness
SC2	The 'standard' self-certification form, for patients eligible to claim statutory sick pay. For the first 7 calendar days of an illness

Rate question:

Question 68 of 93


You issue a prescription for oxycodone for a patient with severe chronic lower back pain. How long is the prescription valid for?

- A. 6 months
- B. 7 days
- C. 13 weeks
- D. 28 days
- E. 3 days


Question stats


76.5% of users answered this question correctly

Session score = 16.2%

Controlled drugs

When prescribing a controlled drug the following must be present on the prescription:

- name and address of the patient
- the form, and where appropriate the strength, of the preparation

- either the total quantity (in both words and figures) of the preparation, or the number (in both words and figures) of dosage units to be supplied

- the dose (cannot write 'as directed')
- prescribers name, signature, address and current date

The 2001 Misuse of Drugs Regulations act defines who is authorised to prescribe controlled drugs. It divided drugs of potential abuse into 5 categories ('schedules') each with own rules on prescribing, supply, possession, record keeping etc

RCGP curriculum

3.2 - Patient Safety

[Curriculum statement](#)

External links

[UK Government](#)

Misuse of Drugs Regulations 2001

Schedule 1	Cannabis, lysergide
Schedule 2	Diamorphine, morphine, pethidine, amphetamine, cocaine
Schedule 3	Barbiturates, buprenorphine, midazolam*, temazepam**
Schedule 4	<p>Part 1: Benzodiazepines (except midazolam and temazepam) and zolpidem</p> <p>Part 2: Androgenic and anabolic steroids, hCG, somatropin</p> <p>Controlled drug prescription requirements do not apply and Schedule 4 controlled drugs are not subject to safe custody requirements</p>
Schedule 5	Includes preparations which because of their strength are exempt from the vast majority of Controlled Drug requirements other than retention of invoices (e.g. Oramorph 10mg/5ml)

Further selected points

- Schedule 2 and 3 drugs are marked 'CD' in the BNF
- a prescription for controlled drugs in Schedules 2,3 & 4 is valid for 28 days
- a pharmacist is generally not allowed to dispense unless all the information required by law is given. With Schedule 2 and 3 drugs a pharmacist is allowed to amend the prescription if 'it specifies the total quantity only in words or in figures or if it contains minor typographical errors, provided that such amendments are indelible and clearly attributable to the pharmacist making them'

*midazolam was changed from schedule 4 to 3 in 2008

**temazepam is excluded from the prescription requirements

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 69 of 93



A 34-year-old woman presents to surgery. She is 12 weeks pregnant and requests a termination of pregnancy as she says she couldn't cope with another child. From your records she has three children aged 3, 6 and 10 years and in the past has had five previous terminations, including one at 17 weeks. In the past she has refused to use contraception due to her perceived risks of side-effects. You have in the past referred people for terminations but are troubled by the number she has had previously and her reluctance to use contraception. What is the most appropriate action?

- A. Tell her it is dangerous to have another termination and advise her not to go ahead on health grounds
- B. Advise her to see a colleague due to your reservations
- ✓ C. Refer for termination of pregnancy + arrange an appointment to discuss contraception
- D. Tell her you want no part in it but give her the details for the British Pregnancy Advisory Service
- E. Refuse to arrange the termination

Firstly it should be acknowledged that no doctor should have to participate/refer/perform a termination of pregnancy if they have ethical objections, for example on religious grounds. They do however have to refer on to another doctor who may help the patient.

In this scenario the doctor has previously referred the patients for terminations but is faced with a situation where they may feel the patient is not taking sufficient responsibility for their own health, i.e. The doctor has no ethical objection to abortion but is troubled/angered by the situation. The key to the answer is to act in a non-judgemental way – if you have referred the patient previously then the only reason you would not refer now is because you have made a judgement about the patient.

The next best option is to refer her to a colleague because of your reservations. Telling her 'you want no part in it' is unprofessional but at least you are referring her to someone who may help her. Refusing to arrange the termination is not performing your duty to help a patient and the worst option is to tell her that it is dangerous to go ahead on health grounds as this is not correct.

—

Rate question:

Question stats

A	1.8%
B	12.1%
C	84.1%
D	2%
E	0.1%

84.1% of users answered this question correctly

Session score = 15.9%

RCGP curriculum


4.1 - Management in Primary Care

[Curriculum statement](#)





Question 70 of 93



A patient glances at the computer screen whilst you take his blood pressure. He notices in the 'summary' section that he is listed as suffering from erectile dysfunction. The patient reports that he has never consulted a doctor regarding this and feels this could have been a misunderstanding during a consultation about depression three years ago. This seems to be confirmed when you view his previous records. What is the most appropriate course of action?

- A. Make a back-dated entry into the records clarifying his symptoms of reduced libido
- B. Keep the entry + record the patient's objection
-  C. Delete the 'Erectile dysfunction' summary
- D. Contact the Information Commissioner's Office
- E. Refer to a urologist to clarify the matter

Question stats

A		9.5%
B		36.3%
C		52%
D		2%
E		0.2%

52% of users answered this question correctly

Session score = 15.7%

This is a factual error and should be amended.

Data Protection Act

The 1998 Data Protection Act is the main piece of legislation that governs the protection of personal data in the UK. The Act covers both manual and computerised records.

There are 8 main principles of the Data Protection Act:

- data must be used for the specific purpose it was collected
- data must not be disclosed to other parties without the consent of the individual whom it is about
- individuals have a right of access to the information held about them
- personal information may be kept for no longer than is necessary and must be kept up-to-date
- personal information may not be transmitted outside the European Union unless consent has been given
- all entities (e.g. a GP surgery) that process personal information must register with the Information Commissioner's Office
- adequate security measures must be in place. Those include technical measures (e.g. passwords, firewalls) and organisational measures (e.g. staff training)
- subjects (i.e. patients) have the right to have factually incorrect information about them corrected

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Information Commissioner's Office](#)

Guidelines on recording opinions

Rate question:

Question 71 of 93



A 15-year-old girl presents to surgery with her friend requesting an abortion. She has missed her last three periods and performed a pregnancy test which was positive. Her boyfriend is also 15-years-old. Due to her gestation it is likely she will require a surgical termination of pregnancy. She does not want to inform her parents. What is the most appropriate action?



- A. Respect her decision not to inform her parents, discuss her options and if she wishes refer her for a termination of pregnancy
- B. Explore why she does not want her parents to know, discuss her options and if she wishes refer her for a termination of pregnancy
- C. Ask her to go for a course of counselling before referring for a termination
- D. Ask the patient to wait in the waiting room whilst you phone her mother and ask her what she wants to happen
- E. Refer her for a termination of pregnancy but let her know you have a legal duty to inform her mother

As she is a minor she is able to consent to medical intervention but not able to refuse it. Regardless of her age she is still entitled to be treated confidentially.

If she goes ahead with a surgical termination of pregnancy it will require inpatient treatment and it is unlikely she would be able to keep this from her parents. It is best to gently explore this issue from the outset and this is therefore the best option. Doctors who have an ethical objection to abortion should refer her on to another doctor.

Referring her for a course of counselling will only delay an already late abortion.

As discussed previously the patient has a right to confidentiality.

—

Rate question:

Question stats

A	4.6%
B	91.6%
C	0.6%
D	0.2%
E	3%

91.6% of users answered this question correctly

Session score = 15.5%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 72 of 93


A 65-year-old man is diagnosed as having a 5.7 cm abdominal aortic aneurysm. At what size would this disqualify him from driving?

- A. 5.5 cm (i.e. He is disqualified straight away)
- B. 6.0 cm
- C. 6.5 cm
- D. 6.7 cm
- E. 7.0 cm


Question stats

A	8%
B	12.6%
C	75.7%
D	1.9%
E	1.8%

75.7% of users answered this question correctly

Session score = 15.3%

DVLA: cardiovascular disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Specific rules

- angioplasty (elective) - 1 week off driving
- CABG - 4 weeks off driving
- acute coronary syndrome- 4 weeks off driving, 1 week if successfully treated by angioplasty
- angina - driving must cease if symptoms occur at rest/at the wheel
- pacemaker insertion - 1 week off driving
- implantable cardioverter-defibrillator: if implanted for sustained ventricular arrhythmia: cease driving for 6 months. If implanted prophylactically then cease driving for 1 month
- successful catheter ablation for an arrhythmia- 2 days off driving
- aortic aneurysm of 6cm or more - notify DVLA. Licensing will be permitted subject to annual review. An aortic diameter of 6.5 cm or more disqualifies patients from driving
- heart transplant: DVLA do not need to be notified

Rate question:
RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DVLA](#)

Cardiovascular disorder guidelines

Question 73 of 93



A 62-year-old man is seen in the rapid access transient ischaemic attack clinic following three episodes over the past two weeks of transient left sided weakness. What is the most appropriate advice to give with regards to driving?

- A. Cannot drive for 12 months
- B. Cannot drive until investigations complete
- C. Inform DVLA but can continue driving
- D. **Cannot drive for 3 months**
- E. Cannot drive for 1 month



DVLA advice post multiple TIAs: cannot drive for 3 months

DVLA: neurological disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Specific rules

- first seizure: 6 months off driving*. For patients with established epilepsy they must be fit free for 12 months before being able to drive
- stroke or TIA: 1 month off driving
- multiple TIAs over short period of times: 3 months off driving
- craniotomy e.g. For meningioma: 1 year off driving**
- pituitary tumour: craniotomy: 6 months; trans-sphenoidal surgery 'can drive when there is no debarring residual impairment likely to affect safe driving'
- narcolepsy/cataplexy: cease driving on diagnosis, can restart once 'satisfactory control of symptoms'

Syncope

- simple faint: no restriction
- unexplained, low risk of recurrence: 4 weeks off
- explained and treated: 4 weeks off
- unexplained: 6 months off

*previously rule was 12 months. It is now 6 months off driving if the licence holder has undergone assessment by an appropriate specialist and no relevant abnormality has been identified on investigation, for example EEG and brain scan where indicated

Question stats

A	3.8%
B	5%
C	0.3%
D	82.9%
E	8.1%

82.9% of users answered this question correctly

Session score = 15.1%

RCGP curriculum

15.7 - Neurological Problems

[Knowledge](#)

[Curriculum statement](#)

External links

[DVLA](#)

Neurological disorder guidelines

**if the tumour is a benign meningioma and there is no seizure history, licence can be reconsidered 6 months after surgery if remains seizure free

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 74 of 93



Which one of the following statements regarding Widowed Parent's Allowance is correct?



- A. Stops if the surviving parent remarries
- B. Only payable to women
- C. Is paid regardless of the deceased partner's national insurance contributions
- D. Only payable to parents on income support and receiving working families tax credits
- E. Is paid for 5 years following the death of the other partner

Question stats

A	<div style="width: 65.1%;"></div>	65.1%
B	<div style="width: 0.8%;"></div>	0.8%
C	<div style="width: 16.6%;"></div>	16.6%
D	<div style="width: 9.8%;"></div>	9.8%
E	<div style="width: 7.7%;"></div>	7.7%

65.1% of users answered this question correctly

Session score = 14.9%

Benefits: bereavement

Whilst GPs are not supposed to be experts on claimable benefits, a rough understanding is expected

Funeral payment	One-off payment to the partner or parent of the deceased if they are on benefits to help pay for a funeral
Bereavement payment	Lump sum given to spouse if they are under the state pension age when their partner died Depends on national insurance contributions Not payable to divorcees
Bereavement allowance	Taxable weekly benefit paid to the spouse for up to 52 weeks from the date of death, if the surviving partner is 45 years or older and less than the state pension age
Widowed Parent's Allowance	Payable to a parent whose husband or wife has died. Eligibility <ul style="list-style-type: none"> surviving partner is bringing up a child < 19 years of age and receiving child benefit deceased partner had made adequate national insurance contributions also if the woman was expecting her late husband's baby divorcees and those who remarry and not eligible to claim

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DirectGov](#)
Bereavement benefits

Rate question:

Questions 75 to 77 of 93



Theme: DVLA: cardiovascular disorders

- A No restriction
- B 1 week off driving
- C 2 weeks off driving
- D 4 weeks off driving
- E 6 weeks off driving
- F 2 months off driving
- G 3 months off driving
- H No restriction but inform DVLA
- I Inform DVLA - cannot drive

For each of the following scenarios select the most appropriate advice regarding driving a car:

- 75.** A 54-year-old man is admitted with a ST-elevation myocardial infarction. He is successfully treated with primary angioplasty.



No restriction

The correct answer is 1 week off driving

- 76.** A man is found to have an abdominal aortic aneurysm of 6.6cm during routine screening.



No restriction

The correct answer is Inform DVLA - cannot drive

- 77.** A 20-year-old man who had a successful cardiac transplant six months ago following an episode of viral cardiomyopathy.



No restriction

Question stats

Average score for registered users:

75	<div></div>	67.3%
76	<div></div>	85.4%
77	<div></div>	58.6%

Session score = 15.6%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DVLA](#)

Cardiovascular disorder guidelines

DVLA: cardiovascular disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be

much stricter

Specific rules

- angioplasty (elective) - 1 week off driving
- CABG - 4 weeks off driving
- acute coronary syndrome- 4 weeks off driving, 1 week if successfully treated by angioplasty
- angina - driving must cease if symptoms occur at rest/at the wheel
- pacemaker insertion - 1 week off driving
- implantable cardioverter-defibrillator: if implanted for sustained ventricular arrhythmia: cease driving for 6 months. If implanted prophylactically then cease driving for 1 month
- successful catheter ablation for an arrhythmia- 2 days off driving
- aortic aneurysm of 6cm or more - notify DVLA. Licensing will be permitted subject to annual review. An aortic diameter of 6.5 cm or more disqualifies patients from driving
- heart transplant: DVLA do not need to be notified

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 78 of 93



The next patient you see is a 27-year-old ST1 doctor in anaesthetics. His asthma is poorly controlled at the moment. He mentions in passing that he smokes cannabis. What is the most appropriate action?

- A. Tell him that unless he stops you will have to inform the hospital he works for
- B. Don't mention his cannabis smoking
- C. Phone the police
- D. Phone the clinical director of anaesthetics to inform him/her
- E. Discuss the potential negative effects of smoking cannabis



There is no indication from the scenario that the actions of the doctor are adversely affecting his work as an anaesthetist. A doctor has come to you as a patient for medical care.

Phoning the clinical director, or threatening to phone the hospital, are poor options as this breaks confidentiality without just grounds. Whilst smoking cannabis is illegal this is not a matter that should be referred to the police.

—

Rate question:

Question stats

A		17.1%
B		1%
C		0.3%
D		2.9%
E		78.6%

78.6% of users answered this question correctly

Session score = 15.4%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 79 of 93



A 45-year-old Polish man comes in to surgery with his 19-year-old daughter. She describes him becoming increasingly withdrawn over the past few weeks and is worried he may be depressed. He speaks very limited English but his daughter is fluent. What is the most appropriate action?

- A. Arrange a consultation for tomorrow using the translation telephone service to get the full history
- B. Use his daughter to act as an interpreter
- C. Use diagrams and body language to elicit the history
- D. Use 'Google Translate', taking it in turns to enter the text
- E. **Arrange an appointment as soon as you can get an interpreter**



Question stats

A		26.3%
B		16.9%
C		0.4%
D		0.4%
E		56.1%

56.1% of users answered this question correctly

Session score = 15.2%

This scenario is increasingly common in the UK due to migration patterns of the past decade.

The best response is to get an interpreter in to surgery. Discussing depressive symptoms will be difficult over the phone. Using his daughter is a poor option as his depression may relate to family problems.

Computer translation services such as Google Translate are not sufficiently accurate to ensure the nuances of his symptoms are understood

Diagrams and body language will not adequately elicit a depression history.

—

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 80 of 93



In the National Health Service, which body commissions acute hospital trusts?



- A. Primary Care Trusts
- B. Strategic Health Authorities
- C. Local GP practices
- D. NHS Foundation Trusts
- E. Department of Health

Question stats

A	<div style="width: 45.9%;"></div>	45.9%
B	<div style="width: 24.3%;"></div>	24.3%
C	<div style="width: 0.8%;"></div>	0.8%
D	<div style="width: 16.3%;"></div>	16.3%
E	<div style="width: 12.6%;"></div>	12.6%

45.9% of users answered this question correctly

Session score = 15%

NHS structure

A simplified structure of the NHS in England is presented below:

- Department of Health, is responsible for:
- 10 Strategic Health Authorities, who are responsible for:
- 150 Primary Care Trusts

The Primary Care Trusts commission services from the following providers:

- primary care services: usually independent contractors such as GP practices, dental practices
- acute hospital trusts and NHS foundation trusts
- mental health trusts
- ambulance trusts
- community health services (e.g. District nursing, health visitors)

In Scotland there are 14 area Health Boards rather than Trusts. In Wales there are 22 Local Health Boards. The system in Northern Ireland is currently in the process of change

RCGP curriculum

4.1 - Management in Primary Care

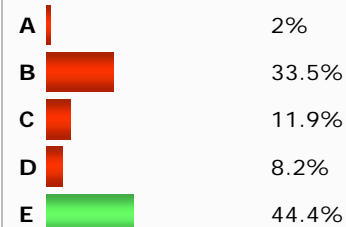
[Curriculum statement](#)

Rate question:

Question 81 of 93


The prescription of controlled drugs are regulated by the 2001 Misuse of Drugs Regulations act. How is Oramorph 10mg/5ml classified?

- A. Schedule 1
- B. Schedule 2
- C. Schedule 3
- D. Schedule 4
- E. **Schedule 5**


Question stats


44.4% of users answered this question correctly

Session score = 14.8%

Controlled drugs

When prescribing a controlled drug the following must be present on the prescription:

- name and address of the patient
- the form, and where appropriate the strength, of the preparation

- either the total quantity (in both words and figures) of the preparation, or the number (in both words and figures) of dosage units to be supplied

- the dose (cannot write 'as directed')
- prescribers name, signature, address and current date

The 2001 Misuse of Drugs Regulations act defines who is authorised to prescribe controlled drugs. It divided drugs of potential abuse into 5 categories ('schedules') each with own rules on prescribing, supply, possession, record keeping etc

RCGP curriculum

3.2 - Patient Safety

[Curriculum statement](#)

External links

[UK Government](#)

Misuse of Drugs Regulations 2001

Schedule 1	Cannabis, lysergide
Schedule 2	Diamorphine, morphine, pethidine, amphetamine, cocaine
Schedule 3	Barbiturates, buprenorphine, midazolam*, temazepam**
Schedule 4	<p>Part 1: Benzodiazepines (except midazolam and temazepam) and zolpidem</p> <p>Part 2: Androgenic and anabolic steroids, hCG, somatropin</p> <p>Controlled drug prescription requirements do not apply and Schedule 4 controlled drugs are not subject to safe custody requirements</p>
Schedule 5	Includes preparations which because of their strength are exempt from the vast majority of Controlled Drug requirements other than retention of invoices (e.g. Oramorph 10mg/5ml)

Further selected points

- Schedule 2 and 3 drugs are marked 'CD' in the BNF
- a prescription for controlled drugs in Schedules 2,3 & 4 is valid for 28 days
- a pharmacist is generally not allowed to dispense unless all the information required by law is given. With Schedule 2 and 3 drugs a pharmacist is allowed to amend the prescription if 'it specifies the total quantity only in words or in figures or if it contains minor typographical errors, provided that such amendments are indelible and clearly attributable to the pharmacist making them'

*midazolam was changed from schedule 4 to 3 in 2008

**temazepam is excluded from the prescription requirements

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 82 of 93



You are a GP registrar and review a 23-year-old who presented with headache, muscle aches and fever. On examination she has a temperature of 38.3°C and complains of some neck and back pains. You feel the most likely diagnosis is influenza but are concerned about the possibility of meningitis given the neck pain. On phoning the hospital you speak to the medical registrar who feels that the presentation sounds very much like the flu and doesn't think admission is necessary. On asking the registrar to accept the patient he refuses, tells you he's got to go as he is so busy and puts the phone down. What is the most appropriate course of action?



- Bleep the registrar again, demand his GMC number and threaten to make a complaint if he does not accept the patient
- Phone the medical consultant on-call and explain your concerns
- Tell the patient to go to A&E herself with a written letter explaining the situation
- Respect the opinion of the registrar and monitor the patient at home
- Tell the patient to go to A&E herself but avoid writing a letter so as not to offend the admitting medical team

Whilst the tempting thing is to have a row with the medical registrar this scenario looks for a more professional approach. Whilst it is true that the most likely cause for the patients' symptoms is influenza it is not unreasonable to want to exclude meningitis.

The best course of action is to try and reason with the registrar but if this fails the consultant on-call should be spoken to. They after all are in charge of the admitting medical team. As you have concerns about the patient it is important that they are seen in secondary care. It is therefore reasonable to send the patient to A&E for assessment, and more professional to give the patient a letter explaining the situation.

It is clear from the scenario that the medical registrar has not made an appropriate assessment of the patient. As you have concerns it is therefore a poor option to monitor the patient at home.

Taking a confrontational approach with the medical registrar is unlikely to result in resolution of the situation and risks getting in the way of patient care.

—

Rate question:

Question stats

A	0.4%
B	83.2%
C	14.2%
D	1.9%
E	0.3%

83.2% of users answered this question correctly

Session score = 14.6%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 83 of 93


A 30-year-old woman with a history of menorrhagia asks for advice. She is about fly from London to New York for a holiday. Her last haemoglobin was 9.8 g/dl. According to Civil Aviation Authority guidelines, what is the lowest haemoglobin this patient can fly with?

- A. 9 g/dl
- B. 10 g/dl
- C. 7 g/dl
- D. 11 g/dl
- E. 8 g/dl


Question stats

A		6.9%
B		1.8%
C		4.8%
D		0.3%
E		86.2%

86.2% of users answered this question correctly

Session score = 14.5%

Fitness to fly

The Civil Aviation Authority (CAA) has issued guidelines on air travel for people with medical conditions; please see the link provided.

Cardiovascular disease

- unstable angina, uncontrolled hypertension, uncontrolled cardiac arrhythmia, decompensated heart failure, severe symptomatic valvular disease: should not fly
- uncomplicated myocardial infarction: may fly after 7-10 days
- complicated myocardial infarction: after 4-6 weeks
- coronary artery bypass graft: after 10-14 days
- percutaneous coronary intervention: after 5 days

Respiratory disease

- pneumonia: should be 'clinically improved with no residual infection'
- pneumothorax: absolute contraindication, the CAA suggest patients may travel 2 weeks after successful drainage if there is no residual air. The British Thoracic Society used to recommend not travelling by air for a period of 6 weeks but this has now been changed to 1 week post check x-ray

Pregnancy

- most airlines do not allow travel after 36 weeks for a single pregnancy and after 32 weeks for a multiple pregnancy
- most airlines require a certificate after 28 weeks confirming that the pregnancy is progressing normally

Surgery
External links

[Civil Aviation Authority](#)
Fitness to fly guidelines

- travel should be avoided for 10 days following abdominal surgery
- laparoscopic surgery: after 24 hours
- colonoscopy: after 24 hours
- following the application of a plaster cast, the majority of airlines restrict flying for 24 hours on flights of less than 2 hours or 48 hours for longer flights

Haematological disorders

- patients with a haemoglobin of greater than 8 g/dl may travel without problems (assuming there is no coexisting condition such as cardiovascular or respiratory disease)

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 84 of 93



Which one of the following statements regarding the reporting of medication related adverse events using the Yellow Card scheme is correct?



- A persistent cough secondary to ramipril should be reported
- A patient who dies of a myocardial infarction four years after starting a statin should be reported
- Diarrhoea occurring after starting a black triangle medicine should be reported
- There is no need to report a rash secondary to lymecycline in a 14-year-old girl
- An allergic rash that develops in an elderly man secondary to co-amoxiclav should be reported

Question stats

A	1.1%
B	0.8%
C	89.9%
D	4.5%
E	3.7%

89.9% of users answered this question correctly

Session score = 14.3%

Yellow Card scheme

The Yellow Card scheme has become the standard way to report adverse reactions to medications. It is run by the Medicines and Healthcare products Regulatory Agency (MHRA).

The following should be reported (taken from the MHRA website)

- all suspected adverse drug reactions for new medicines (identified by the black triangle symbol) should be reported
- all suspected adverse drug reactions occurring in children, even if a medicine

has been used off-label

- all serious* suspected adverse drug reactions for established vaccines and

medicines, including unlicensed medicines, herbal remedies, and medicines used off-label

Other information

- Yellow Cards are found at the back of the BNF or reports can be completed online (www.yellowcard.gov.uk)
- any suspected reactions (not just confirmed) should be reported
- patients can report adverse events
- Yellow Cards are sent to the MHRA who in collate and assess the information. In turn the MHRA may consult with the Commission on Human Medicines (CHM), an independent scientific advisory body on medicines safety

*reactions which are fatal, life-threatening, disabling or incapacitating, result in or

RCGP curriculum

3.2 - Patient Safety

[Curriculum statement](#)

External links

[MHRA](#)

Yellow Card scheme

prolong hospitalisation, or medically significant are considered serious.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 85 of 93


Which one of the following drugs should be prescribed using the proprietary, rather than the generic name?



- A. Mesalazine
- B. Betahistine
- C. Cabergoline
- D. Azathioprine
- E. Sulfasalazine

Question stats

A	<div style="width: 56.1%;"></div>	56.1%
B	<div style="width: 3.4%;"></div>	3.4%
C	<div style="width: 20%;"></div>	20%
D	<div style="width: 10.2%;"></div>	10.2%
E	<div style="width: 10.2%;"></div>	10.2%

56.1% of users answered this question correctly

Session score = 14.1%

Prescribing guidance

The BNF issues guidance on good practice when prescribing, selected points include:

- drugs should generally be prescribed by their generic name, except for certain preparations where the clinical effect may differ - please see the list below
- when writing numbers unnecessary decimal points should be avoided e.g. 250 ml not 0.25 l

Drugs which should be prescribed by brand

- modified release calcium channel blockers
- antiepileptics
- ciclosporin and tacrolimus
- mesalazine
- lithium
- aminophylline and theophylline
- methylphenidate
- CFC-free formulations of beclometasone
- dry powder inhaler devices

Rate question:

RCGP curriculum

3.2 - Patient Safety

[Curriculum statement](#)

Questions 86 to 88 of 93



Theme: Scoring systems used in medicine

- A** HAD
- B** PHQ-9
- C** Smith scale
- D** MMSE
- E** Machin classification
- F** Child-Pugh classification
- G** APGAR
- H** Baxter score
- I** CURB-65
- J** Epworth scale

Question stats

Average score for registered users:

86	<div style="width: 93.1%;"></div>	93.1%
87	<div style="width: 85.1%;"></div>	85.1%
88	<div style="width: 96.6%;"></div>	96.6%

Session score = 14.8%

For each of the following please select the appropriate scoring system:

86. Can be used to evaluate the anxiety level of a patient



HAD

PHQ-9 only assess depressive symptoms.

87. A scoring system used to assess the severity of liver cirrhosis



HAD

The correct answer is Child-Pugh classification

88. Assesses the health of a newborn immediately after birth



HAD

The correct answer is APGAR

Scoring systems

There are now numerous scoring systems used in medicine. The table below lists some of the more common ones:

CHADS2	Used to determine the need to anticoagulate a patient in atrial fibrillation
ABCD2	Prognostic score for risk stratifying patients who've had a suspected TIA
NYHA	Heart failure severity scale
DAS28	Measure of disease activity in rheumatoid arthritis
Child-Pugh classification	A scoring system used to assess the severity of liver cirrhosis
Wells score	Helps estimate the risk of a patient having a deep vein thrombosis
MMSE	Mini-mental state examination - used to assess cognitive impairment
HAD	Hospital Anxiety and Depression (HAD) scale - assesses severity of anxiety and depression symptoms
PHQ-9	Patient Health Questionnaire - assesses severity of depression symptoms
GAD-7	Used as a screening tool and severity measure for generalised anxiety disorder
Edinburgh Postnatal Depression Score	Used to screen for postnatal depression
SCOFF	Questionnaire used to detect eating disorders and aid treatment
AUDIT	Alcohol screening tool
CAGE	Alcohol screening tool
FAST	Alcohol screening tool
CURB-65	Used to assess the prognosis of a patient with pneumonia
Epworth Sleepiness Scale	Used in the assessment of suspected obstructive sleep apnoea
IPSS	International prostate symptom score
Gleason score	Indicates prognosis in prostate cancer
APGAR	Assesses the health of a newborn immediately after birth
Bishop score	Used to help assess the whether induction of labour will be required
Waterlow score	Assesses the risk of a patient developing a pressure sore
FRAX	Risk assessment tool developed by WHO which calculates a patients 10-year risk of developing an osteoporosis related fracture

Can you think of any other commonly used scoring systems?

Rate question:

Question 89 of 93



You are seeing a patient that you have known for the past 3 months who has disabling rheumatoid arthritis. At the end of the consultation she gives you a box of chocolates. What is the most appropriate response?

- A. Decline the gift advising her of your professional guideline
- B. Decline the gift and advise the patient that it was an inappropriate offer as it may be interpreted as a form of bribe
- ✓ C. **Accept the gift and thank the patient for her kindness**
- D. Accept the gift but declare on the practice 'gift register'
- E. Decline the gift but ask her to give the equivalent amount of money to charity

Question stats

A	2.3%
B	0.2%
C	66.2%
D	31.1%
E	0.2%

66.2% of users answered this question correctly

Session score = 14.6%

This scenario looks at whether you can apply judgement rather than answer in a knee jerk way.

A patient giving you a box of chocolates is a perfectly reasonable way for them to express thanks. There is no need to register this, given the relatively small size of the gift. Asking the patient to give an equivalent amount to charity may seem like a nice gesture but monetarises the offering.

Declining the gift will probably come across as odd and rude. Telling the patient off is even worse.

—

Rate question:

RCGP curriculum


4.1 - Management in Primary Care

[Curriculum statement](#)






Question 90 of 93



A 50-year-old bank clerk is seen in the diabetes clinic. He has type 2 diabetes mellitus which is currently treated with metformin. Unfortunately his glycaemic control is suboptimal. He is intolerant of sulfonylureas and thiazolidinediones and it is decided to add exenatide. What is the most appropriate action with respect of the DVLA?

- A. Inform DVLA but can continue to drive
- B. Inform DVLA, must check blood sugars before journey and at least every 2 hours
-  C. No need to inform DVLA
- D. Inform DVLA, cannot drive until 4 weeks have passed without hypoglycaemic episodes
- E. Inform DVLA, cannot drive until 3 months have passed without hypoglycaemic episodes

Question stats

A		14.9%
B		2.6%
C		62.7%
D		14%
E		5.7%

62.7% of users answered this question correctly

Session score = 14.4%

The April 2009 AKT feedback report made specific mention of fitness to drive rules.

DVLA: diabetes mellitus

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles (HGVs) tend to be much stricter

Specific rules

- if on insulin then cannot hold HGV licence*
- if on insulin then patient can drive a car as long as they have hypoglycaemic awareness and no relevant visual impairment
- if on tablets, exenatide or gliptin no need to notify DVLA
- if diet controlled alone and no relevant complications (e.g. Maculopathy) then no requirement to inform DVLA

*there are complex exceptions to this rule, but these are not relevant for the purposes of the exam

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DVLA](#)

Diabetes mellitus guidelines

Question 91 of 93



Please review the death certificate below:

1a Congestive cardiac failure

1b Essential hypertension

1c

2 Old age, type 2 diabetes mellitus

Which one of the statements regarding this certificate is correct?

- A. Type 2 diabetes mellitus should have been recorded in 1c
- B. It is unacceptable to put a type of organ failure in section 1a
- C. Congestive cardiac failure is the underlying cause of death
- D. Old age should not be recorded in section 2



- E. Congestive cardiac failure is the direct cause of death

Using a type of organ failure in 1a is acceptable if the underlying cause is stated. Type 2 diabetes mellitus does not lead to essential hypertension and therefore should be recorded in section 2.

Death certification

There is no legal definition of death in the UK although guidelines exist. Current guidance states 'death should be verified by a doctor, or other suitably qualified personnel' which means staff such as nurse practitioners may verify (but not certify) death.

After a patient has died a doctor needs to complete a medical certificate of cause of death (MCCD). There is a list of circumstances in which a doctor should notify the Coroner prior to completing the MCCD.

Some specific points on completing the MCCD:

- 'old age' as 1a is only acceptable if the patient was at least 80 years of age . It can be used if certain conditions are met but is discouraged
- 'natural causes' is not acceptable
- organ failure (e.g. 'liver failure') can only be used if you specify the disease or

condition that led to the organ failure (e.g. 1b: Hepatitis C)

- abbreviations should be avoided (except HIV and AIDS*)

The family then take the MCCD to the local Registrar of Births, Deaths, and Marriages office to register the death. If the Registrar decides that the death does

Question stats

A	7.8%
B	12.3%
C	9.8%
D	13.7%
E	56.3%

56.3% of users answered this question correctly

Session score = 14.3%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Home Office](#)

Guidance for doctors completing Medical Certificates

[Ministry of Justice](#)

Cremation guidelines

not need reporting to the Coroner he/she will issue:

- certificate for Burial or Cremation
- certificate of Registration of Death (for Social Security purposes)
- if requested. Copies of the Death Register (banks and insurance companies expect to see them)

If the family would like the burial to be outside of England, an Out of England Order is needed from the coroner.

*why this is I'm not sure - probably due to how well known the terms are amongst the general public

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 92 of 93



Which one of the following is a valid reason for exception reporting a patient under the quality and outcomes framework (QOF)?



- A patient who has spent more than 3 months in the past 12 months in hospital
- A child who is being treat for acute lymphoblastic leukaemia who has coexistent asthma
- A patient who is on the maximum tolerated doses of medication whose treatment remains sub-optimal
- A patient with localised prostate cancer who has hypertension
- A patient who is caring for a relative who is terminally ill

Question stats

A	4.4%
B	3.3%
C	89.6%
D	0.6%
E	2.2%

89.6% of users answered this question correctly

Session score = 14.1%

Quality and Outcomes Framework

The Quality and Outcomes Framework (QOF) is the annual reward and incentive programme detailing GP practice achievement results. It was introduced as part of the new General Medical Services (GMS) to incentivise not only the management of chronic disease such as diabetes but also to improve the organisation of the practice and patient experience

Other points

- for clinical indicators the value of a point is determined by the prevalence of that condition in the practice
- participation in the QOF is voluntary
- 5% of practices should be visited at random to help prevent fraud. The PCT visiting team will normally consist of a PCT management representative, a GP and a patient representative

The table below shows the four key areas on which the QOF is based

Clinical indicators	697 points	Standards linked to the care of patients suffering from chronic diseases
Organisational	167.5 points	Standards relating to records and information, communicating with patients, education and training, medicines management and clinical and practice management
Additional services	44 points	Covering cervical screening, child health surveillance, maternity services and contraceptive services
Patient experience	91.5 points	Based on patient surveys and length of consultations

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Patients may be 'exception reported' in the following situations:


- patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the preceding 12 months
- patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances e.g. Terminal illness, extreme frailty
- patients newly diagnosed within the practice or who have recently registered with the practice, who should have measurements made within 3 months and delivery of clinical standards within 9 months e.g. Blood pressure or cholesterol measurements within target levels
- patients who are on maximum tolerated doses of medication whose treatment remain sub-optimal
- patients for whom prescribing a medication is not clinically appropriate e.g. Those who have an allergy, another contraindication or have experienced an adverse reaction
- where a patient has not tolerated medication
- where a patient does not agree to investigation or treatment (informed dissent), and this has been recorded in their medical records
- where the patient has a supervening condition which makes treatment of their condition inappropriate e.g. Cholesterol reduction where the patient has liver disease
- where an investigative service or secondary care service is unavailable

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 93 of 93


During a practice meeting the partners ask you to prescribe Ventolin by brand instead of salbutamol as it is currently cheaper. What is the most appropriate response?

- A. Speak to your postgraduate dean as you are being pressured to prescribe inappropriately
- B. Give patients a choice
-  C. **Accept the request as it seems reasonable**
- D. Tell the partners that you refuse as it is bad practice to prescribe by brand
- E. Contact the GMC

Question stats

A	2.1%
B	9.8%
C	80.9%
D	6.8%
E	0.3%

80.9% of users answered this question correctly

Session score = 14%

Such scenarios are becoming increasingly common in the NHS. Of course during our training we are taught to prescribe generically when possible. One of the main reasons for this is to help limit costs for the NHS. Whilst it may seem ridiculous that branded preparations are cheaper than generic ones this is not uncommon anymore. It therefore seems to reasonable to prescribe Ventolin by brand.

Giving patients a choice may be an option but is likely to confuse the message that generic drugs are the same, regardless of manufacturer.

Whether patients who are used to taking a generic version of salbutamol should automatically be changed to Ventolin is another question.

—

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 2 of 184



Which one of the following products is 'blacklisted' under Part XVIII A of the Drug Tariff and hence cannot be dispensed on the NHS?

- A. Juvela gluten-free bread
- B. Clozapine
- C. Farley's Soya Formula
- D. EpiPen
- E. Topical minoxidil



Question stats

A	7.8%
B	5.1%
C	20.7%
D	1.5%
E	64.9%

64.9% of users answered this question correctly

Session score = 50%

Part XVIII A of the Drug Tariff - The Blacklist

Theoretically any food, drug, toiletry or cosmetic may be prescribed on an NHS prescription unless the product is listed in Part XVIII A of the Drug Tariff ('the blacklist').

Medical devices (appliances) can only be prescribed on NHS prescriptions if the product is listed in Part IX of the Drug Tariff.

If a proprietary product is listed in 'the blacklist', it cannot be dispensed on the NHS. The only exception to this is if the prescription is issued using a generic name and the generic name is not itself included in the blacklist.

Some examples of 'blacklisted' products:

- Propecia (finasteride for male-pattern alopecia)
- Regaine (topical minoxidil for male-pattern alopecia)
- Calpol (see above, paracetamol suspension may be prescribed)

The Selected List

Part XVIII B of the Drug Tariff lists items that may only be prescribed for the patient groups and for the purpose listed in the Drug Tariff. Prescribers must endorse prescriptions for these products 'SLS'. This section covers the prescription of phosphodiesterase type-5 inhibitors.

For example:

- Niferex Elixir 30ml Paediatric Dropper Bottle - infants born prematurely - prophylaxis in treatment of iron deficiency
- sildenafil - only if treated prior to September 1998 or if has one of the following conditions: diabetes mellitus, Parkinson's disease, poliomyelitis, multiple sclerosis, prostate cancer, severe pelvic injury, single gene neurological disease, spina bifida, spinal cord injury, renal failure treated with dialysis or transplant, prostatectomy or radical pelvic surgery

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[NHS](#)

Electronic Drug Tariff

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 3 of 184



Which one of the following would not justify removal from the practice list?

- A. A patient who has made a racially abuse comment to a member of staff whilst drunk
- B. A patient who has moved out of the catchment area
- C. A patient who refuses to confine their dog on the request of a GP during a home visit
- ✓ D. A patient who refuses to respond to any form of communication from the practice
- E. A patient who has been shown to have lied about a recent hospital admission to obtain a sick note

Question stats

A	7%
B	8.6%
C	18.6%
D	55.1%
E	10.6%

55.1% of users answered this question correctly

Session score = 33.3%

Removing patients from the practice list

The following is based on the 2004 Royal College guidelines.

Examples of situations that may justify removal:

- unacceptable behaviour: for example violence, sexual harassment, stalking, racial abuse
- crime and deception: for example fraudulently obtaining drugs, stealing from the practice
- distance: a patient moves outside the catchment area

Examples of situations that do not normally justify removal:

- clinical matters: ? patient choice, for example refusing to attend for health screening or not bringing their child for immunisations
- critical questioning and/or complaints

Removal is never justified in the following situations

- where there is an exacting or highly dependent patient, condition or disability
- patients with a high levels of anxiety or demand about perceived symptoms
- due to age, gender, ethnic origin, religion or sexual orientation

Further guidance is given on exceptional situations where there is an 'irretrievable breakdown' in the doctor-patient relationship. It is important that a formal process is agreed to try and rectify this problem rather than unilaterally declaring an irretrievable breakdown without giving any reasons to the patient.

Removing a patient from the practice list involves the following steps:

- give warning to the patient

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[RCGP](#)

Removing patients from the practice list guidelines

- inform the Primary Care Trust in writing
- write to the patient

The patient's family should not be automatically removed although in practice this may be necessary.

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 4 of 184


A mother whose 14-year-old daughter had a history of glue ear when younger asks the practice manager for a copy of her medical records. Which one of the following statements governing access to medical records is incorrect?

- A. Doctors should withhold information they may feel is damaging to the patients physical or mental health
- B. Access to records should always be given within 40 days
- C. Parents may request access to their children's records
- D. Competent children may seek access to their records
- E. **Should be done without a fee**



A fee is normally charged for access to medical records

Access to medical records

A patients right to view their own medical records is governed by the 1998 Data Protection Act and the 1990 Access to Health Records Act

Key principles

- patients have a right to see what is written in their medical record
- competent children may seek access to their records
- parents may request access to their children's (< 16 years) records
- doctors should not release information they feel may damage a patients emotional or physical health
- following the Data Protection Act access to medical records should be given within 40 days. This is the legal timeframe, however Department of Health policy states that access should be given within 21 days
- a fee may be charged

Rate question:

Question stats

A		16.4%
B		15.8%
C		5.7%
D		5.6%
E		56.5%

56.5% of users answered this question correctly

Session score = 25%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 5 of 184


Which one of the following situations would not automatically require a doctor to contact the coroner to discuss the death?



- A. 44-year-old man with history of depression found hanging in home
- B. 38-year-old man dies from cerebral malaria contracted in India
- C. 84-year-old nursing home resident, found dead in bed, seen 3 weeks ago by local GP
- D. 68-year-old prisoner dies following myocardial infarction
- E. 78-year-old man dies 10 hours after being admitted to local hospital with myocardial infarction

Question stats

A	2%
B	52.2%
C	21.6%
D	8.8%
E	15.4%

52.2% of users answered this question correctly

Session score = 20%

Death certification: notifiable deaths

The following deaths should be reported to the coroner

- unexpected or sudden deaths
- when the doctor attending the deceased did not see them within 14 days before death
- if a death occurs within 24 hours of hospital admission
- accidents and injuries
- suicide
- industrial injury or disease (e.g. asbestosis)
- deaths occurring as a result of ill treatment, starvation or neglect
- the death occurred during an operation or before recovery from the effect of an anaesthetic
- poisoning, including taking illicit drugs
- stillbirths - if there is doubt as to whether the child was born alive
- prisoner or people in police custody
- service disability pensioners

Rate question:
RCGP curriculum


4.1 - Management in Primary Care

[Curriculum statement](#)

Question 6 of 184



A 54-year-old man is admitted following a myocardial infarction associated with ST elevation. He is treated with thrombolysis and does not undergo angioplasty. What advice should he be given regarding driving?

- A. Can continue driving but must inform DVLA
- B. Cannot drive until an angiogram has been performed and reviewed by a cardiologist
- C. Cannot drive for 1 week
-  D. **Cannot drive for 4 weeks**
- E. Cannot drive for 12 weeks

DVLA advice post MI - cannot drive for 4 weeks

The April 2009 AKT feedback report made specific mention of fitness to drive rules.

DVLA: cardiovascular disorders

The guidelines below relate to car/motorcycle use unless specifically stated. For obvious reasons, the rules relating to drivers of heavy goods vehicles tend to be much stricter

Specific rules

- angioplasty (elective) - 1 week off driving
- CABG - 4 weeks off driving
- acute coronary syndrome- 4 weeks off driving, 1 week if successfully treated by angioplasty
- angina - driving must cease if symptoms occur at rest/at the wheel
- pacemaker insertion - 1 week off driving
- implantable cardioverter-defibrillator: if implanted for sustained ventricular arrhythmia: cease driving for 6 months. If implanted prophylactically then cease driving for 1 month
- successful catheter ablation for an arrhythmia- 2 days off driving
- aortic aneurysm of 6cm or more - notify DVLA. Licensing will be permitted subject to annual review. An aortic diameter of 6.5 cm or more disqualifies patients from driving
- heart transplant: DVLA do not need to be notified

Rate question:

Question stats

A	2.1%
B	3.4%
C	8.8%
D	78.4%
E	7.3%

78.4% of users answered this question correctly

Session score = 16.7%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[DVLA](#)

Cardiovascular disorder guidelines

Question 7 of 184



One of your patients develops a photosensitive rash after starting a newly licensed medication. You decide to complete a Yellow Card. Who is responsible for collating and assessing the Yellow Card reports?



- A. Medicines and Healthcare products Regulatory Agency (MHRA)
- B. British National Formulary (BNF)
- C. Local Primary Care Trust (PCT)
- D. Commission on Human Medicines (CHM)
- E. National Patient Safety Agency (NPSA)

Question stats

A	<div style="width: 77.2%;"></div>	77.2%
B	<div style="width: 5.5%;"></div>	5.5%
C	<div style="width: 1.7%;"></div>	1.7%
D	<div style="width: 2.1%;"></div>	2.1%
E	<div style="width: 13.4%;"></div>	13.4%

77.2% of users answered this question correctly

Session score = 14.3%

Yellow Card scheme

The Yellow Card scheme has become the standard way to report adverse reactions to medications. It is run by the Medicines and Healthcare products Regulatory Agency (MHRA).

The following should be reported (taken from the MHRA website)

- all suspected adverse drug reactions for new medicines (identified by the black triangle symbol) should be reported
- all suspected adverse drug reactions occurring in children, even if a medicine

has been used off-label

- all serious* suspected adverse drug reactions for established vaccines and

medicines, including unlicensed medicines, herbal remedies, and medicines used off-label

Other information

- Yellow Cards are found at the back of the BNF or reports can be completed online (www.yellowcard.gov.uk)
- any suspected reactions (not just confirmed) should be reported
- patients can report adverse events
- Yellow Cards are sent to the MHRA who in collate and assess the information. In turn the MHRA may consult with the Commission on Human Medicines (CHM), an independent scientific advisory body on medicines safety

*reactions which are fatal, life-threatening, disabling or incapacitating, result in or prolong hospitalisation, or medically significant are considered serious.

RCGP curriculum

3.2 - Patient Safety

[Curriculum statement](#)

External links

[MHRA](#)

Yellow Card scheme

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 8 of 184



Which one of the following statements regarding cremation forms is incorrect?



- A. Cremation 1 is the form to be completed by the patient's own GP
- B. The independent doctor who completes the form should have held a full GMC registration for more than 5 years
- C. Two doctors are required
- D. A fee is payable to each doctor
- E. Cremation 5 should be completed by an independent doctor

Cremation 1 (previously part A) is completed by the next of kin. Cremation 4 should be completed by the patient's own GP.

Cremation forms

Basics

- the Ministry of Justice have issued new cremation regulations which came into effect on 1st January 2009
- there is a new right of inspection of medical forms to the applicant of cremation
- 2 doctors are required to confirm both the identity and that the cause of death was not suspicious
- form B is replaced by **Cremation 4**. This should be completed by the patient's own GP or a doctor looking after them during their last illness e.g. Hospital doctors
- form C is replaced by **Cremation 5**. This should be completed by an independent doctor who must have held a full GMC registration for more than 5 years. The doctor is expected to discuss the case with the patient's GP and view the body
- the form Cremation 5 doctor cannot be a partner or work colleague of the form Cremation 4 doctor or a relative of the deceased; the two doctors must be independent of one another, i.e. Not on the same team in hospital or at the same GP surgery
- a fee is payable to each doctor

Rate question:

Question stats

A	<div style="width: 62.2%;"></div>	62.2%
B	<div style="width: 10.9%;"></div>	10.9%
C	<div style="width: 3.5%;"></div>	3.5%
D	<div style="width: 3.2%;"></div>	3.2%
E	<div style="width: 20.1%;"></div>	20.1%

62.2% of users answered this question correctly

Session score = 12.5%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Questions 9 to 11 of 184



Theme: Consultation models

- A** Heron
- B** Byrne and Long
- C** Berne
- D** Fraser
- E** Neighbour
- F** Balint
- G** Stott and Davis
- H** Helman's folk model
- I** Pendleton

For each of the following tasks select the consultation model most associated with it

9. Safety netting



Heron

The correct answer is Neighbour

10. Handing over



Heron

The correct answer is Neighbour

11. Considering other problems



Heron

The correct answer is Pendleton

Question stats

Average score for registered users:

9	<div></div>	68.6%
10	<div></div>	49.2%
11	<div></div>	39.3%

Session score = 9.1%

RCGP curriculum

2 - The General Practice Consultation

[Curriculum statement](#)

Consultation models

Calgary-Cambridge observation guide- Kurtz and Silverman - 1996

- initiating the session
- gathering information
- building the relationship

- giving information, explaining and planning
- closing the session

Stewart - patient-centred clinical method - 1995. 2003

- exploring both the disease and the illness experience
- understanding the whole person
- finding common ground
- incorporating prevention and health promotion
- enhancing the doctor-patient relationship
- being realistic (with time and resources)

Pendleton - The Consultation: an Approach to Learning and Teaching - 1984, 2003

- define the reason for the patient's attendance (ideas, concerns and expectations)
- consider other problems
- with the patient, choose an appropriate action for each problem
- achieve a shared understanding of the problems with the patient
- involve the patient in the management and encourage him/her to accept appropriate responsibility
- use time and resources appropriately
- establish or maintain a relationship with the patient which helps to achieve the other tasks

Fraser - Areas of competence - 1992

- interviewing and history-taking
- physical examination
- diagnosis and problem-solving
- patient management
- relating to patients
- anticipatory care
- record keeping

Neighbour - The Inner Consultation - five checkpoint model - 1987

- connecting
- summarising
- handing over
- safety netting
- housekeeping

Tuckett - meeting of two experts - 1985

- the consultation is a meeting between two experts
- doctors are experts in medicine
- patients are experts in their own illnesses
- shared understanding is the aim
- doctors should seek to understand the patient's beliefs
- doctors should address explanations in terms of the patient's belief system

Stott and Davis - Exceptional potential of the consultation - 1979

- management of presenting problems
- management of continuing problems
- modification of help-seeking behaviour
- opportunistic health promotion

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 12 of 184



A patient comes to surgery requesting a 'sick note'. At what point do you need to issue a Statement of Fitness for Work?



- A. After they have been off work for more than 7 calendar days
- B. After they have been off work for more than 5 working days
- C. After they have been off work for more than 5 calendar days
- D. After they have been off work for more than 10 working days
- E. After they have been off work for more than 7 working days

Patients can self-cert up to 7 **calendar** days

Statement of Fitness for Work

In 2010 sick notes became fit notes, or more formally the Statement of Fitness for Work. They have been introduced to reflect the fact that in the majority of cases patients do not need to be 100% fit before returning to work. The major change is allowing a doctor to advise that a patient 'may be fit for work taking account of the following advice'.

This information is taken from the Department of Work and Pensions website. Please see the link for further details.

Other changes

- the Statement of Fitness for Work replaces the Med3 and Med5 in one form
- the Med4, Med6 and RM 7 forms have been withdrawn due to the replacement of Incapacity Benefit with the Employment and Support Allowance
- telephone consultations are now an acceptable form of assessment
- there is no longer a box to say a patient is fit for work. There is however an option to state if you need to assess your patient's fitness for work again at the end of the statement period
- there is increased space for comments on the functional effects of the condition, including tick boxes for simple things that may help a patient back to work
- during the first 6 months of an illness the new statement can be issued for no longer than 3 months.. After this time it may be issued for an indefinite period

Things that stay the same

- can only be completed by a doctor
- you can still the advise a patient that they are not fit for work (of any type)

Question stats

A	<div style="width: 64.7%;"></div>	64.7%
B	<div style="width: 11.2%;"></div>	11.2%
C	<div style="width: 1.4%;"></div>	1.4%
D	<div style="width: 2.7%;"></div>	2.7%
E	<div style="width: 20.1%;"></div>	20.1%

64.7% of users answered this question correctly

Session score = 8.3%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Department of Work and Pensions](#)

Statement of Fitness for Work

- the advice on the statement is not binding on employers

The statement may be issued:

- on the day that you assessed the patient
- on a date after you assessed your patient if you consider that it would have been reasonable to issue a statement on the day of the assessment
- after consideration of a written report from another doctor or registered health care professional

There are 4 'tick boxes' included on the form which represent common approaches to aid a return to work. One or more may be ticked. Other approaches can be suggested in the comments box. The options are:

- a phased return to work
- altered hours
- amended duties
- workplace adaptations

Patients may self-certify for the first 7 calendar days:

SC1	Self-certification, for patients not eligible to claim statutory sick pay (e.g. Unemployed or self-employed). For the first 7 calendar days of an illness
SC2	The 'standard' self-certification form, for patients eligible to claim statutory sick pay. For the first 7 calendar days of an illness

Rate question:

Question 13 of 184



Please review the death certificate below:

1a Liver failure

1b Hepatocellular carcinoma

1c Chronic Hepatitis B infection

2 Type 2 diabetes mellitus

What is the underlying cause of death?



- A. Not listed on this certificate e.g. Intravenous drug use
- B. **Chronic Hepatitis B infection**
- C. Hepatocellular carcinoma
- D. Liver failure
- E. Type 2 diabetes mellitus

The underlying cause of death (which is important for mortality statistics) is the event in section 1 which triggered the series of events which led to the death of the patient.

Death certification

There is no legal definition of death in the UK although guidelines exist. Current guidance states 'death should be verified by a doctor, or other suitably qualified personnel' which means staff such as nurse practitioners may verify (but not certify) death.

After a patient has died a doctor needs to complete a medical certificate of cause of death (MCCD). There is a list of circumstances in which a doctor should notify the Coroner prior to completing the MCCD.

Some specific points on completing the MCCD:

- 'old age' as 1a is only acceptable if the patient was at least 80 years of age . It can be used if certain conditions are met but is discouraged
- 'natural causes' is not acceptable
- organ failure (e.g. 'liver failure') can only be used if you specify the disease or

condition that led to the organ failure (e.g. 1b: Hepatitis C)

- abbreviations should be avoided (except HIV and AIDS*)

The family then take the MCCD to the local Registrar of Births, Deaths, and Marriages office to register the death. If the Registrar decides that the death does

Question stats

A	1.7%
B	53.6%
C	23%
D	20.3%
E	1.4%

53.6% of users answered this question correctly

Session score = 7.7%

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[Home Office](#)

Guidance for doctors completing Medical Certificates

[Ministry of Justice](#)

Cremation guidelines

not need reporting to the Coroner he/she will issue:

- certificate for Burial or Cremation
- certificate of Registration of Death (for Social Security purposes)
- if requested. Copies of the Death Register (banks and insurance companies expect to see them)

If the family would like the burial to be outside of England, an Out of England Order is needed from the coroner.

*why this is I'm not sure - probably due to how well known the terms are amongst the general public

Rate question:

All contents of this site are ©2010 passmedicine.com - [Terms and Conditions](#)

Question 15 of 184



The following symbol appears in the British National Formulary:



What does it mean?



- A. Newly licensed medicine
- B. Not prescribable on the NHS
- C. Denotes a preparation that is less suitable to prescribe
- D. Should only be prescribed by a specialist
- E. Controlled drug

Question stats

A	<div style="width: 60.1%;"></div>	60.1%
B	<div style="width: 9.3%;"></div>	9.3%
C	<div style="width: 10.6%;"></div>	10.6%
D	<div style="width: 6.4%;"></div>	6.4%
E	<div style="width: 13.6%;"></div>	13.6%

60.1% of users answered this question correctly

Session score = 6.7%

British National Formulary symbols

The table below explains the meanings of the main symbols used in the BNF:

	Denotes a preparation that is less suitable to prescribe
	Newly licensed medicines
	Not prescribable on the NHS
	Prescription-only medicine
	Controlled drug

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

Question 1 of 2

A patient of yours is planning a holiday to France in the summer. He has arranged private travel insurance for his family but has also heard about a scheme to enable him to access state run healthcare whilst abroad. Which one of the following should you advise him about?

- A. EU20 insurance scheme
- B. E111
- C. E20 Card
- D. E110
- ✓ E. **European Health Insurance Card**

Question stats

A	6.5%
B	24.5%
C	6.1%
D	4.1%
E	58.8%

58.8% of users answered this question correctly

Session score = 100%

European Health Insurance Card

The European Health Insurance Card (EHIC) entitles people to access government run healthcare in the European Economic Area and Switzerland at a reduced cost or for free. The EHIC replaced the previous E111 form in 2004.

Key points

- the EHIC is free and valid for 5 years
- it does not replace the need for private medical insurance. EHIC does fund private healthcare or provide other private insurance benefits such as search and rescue
- does not generally cover planned treatments (e.g. Varicose vein surgery) but does cover exacerbations of chronic conditions, renal dialysis and maternity care

Rate question:
RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)



External links

[NHS](#)
European Health Insurance Card






Question 2 of 2



Which one of the following statements regarding the European Health Insurance Card (EHIC) is correct?

-  A. **Covers renal dialysis**
-  B. Ensures all emergency treatment in the European Economic Area is free at the point of delivery
- C. Is valid for life once obtained
- D. Negates the need for private insurance whilst visiting the European Economic Area
- E. Is valid in the Channel Islands and Isle of Man

Question stats

A		29.4%
B		49%
C		2.9%
D		7.8%
E		10.8%

29.4% of users answered this question correctly

Session score = 50%

European Health Insurance Card

The European Health Insurance Card (EHIC) entitles people to access government run healthcare in the European Economic Area and Switzerland at a reduced cost or for free. The EHIC replaced the previous E111 form in 2004.

Key points

- the EHIC is free and valid for 5 years
- it does not replace the need for private medical insurance. EHIC does fund private healthcare or provide other private insurance benefits such as search and rescue
- does not generally cover planned treatments (e.g. Varicose vein surgery) but does cover exacerbations of chronic conditions, renal dialysis and maternity care

Rate question:

RCGP curriculum

4.1 - Management in Primary Care

[Curriculum statement](#)

External links

[NHS](#)

European Health Insurance Card